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 I N A
 T O U R T H R O U G H T H E W O R L D ;
 C O N T A I N I N G

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| <p>I. A General Account of all the Countries in the World, remarkable for either Natural or Artificial Curiosities ; their Situation, Boundaries, Extent, and Divisions ; their Rivers, Air, Soil, chief Cities, &c</p> <p>II. A particular Account of the most curious natural Productions of each Country, in the Animal, Vegetable, and Fossil Kingdoms ; of remarkable Mountains, Caverns, and Volcanos ; of Medicinal and other singular Springs ; of Cataracts, Whirlpools, &c.</p> <p>III. An Historical Account of the most remarkable Earthquakes, Inundations, Fires, Epidemic Diseases, and other pub-</p> | <p>lic Calamities, which have at different Times visited the Inhabitants.</p> <p>IV. Extraordinary Instances of Longevity, Fertility, &c. among the Inhabitants ; together with an Account of their most celebrated Inventions, Discoveries, &c.</p> <p>V. Particular Descriptions of the most remarkable public Buildings, and other singular Productions of Art.</p> <p>VI. Curious Remains of Antiquity ; remarkable Laws, Customs, and Traditions of the Inhabitants ; together with a Summary View of the most extraordinary Revolutions among them.</p> |
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Illustrated and embellished with Copper Plates.

The SECOND EDITION, greatly improved.

V O L . V I I .

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1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice" and "The Hon. Mr. Justice".

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Account of the most curious NATURAL PRODUCTIONS of DENMARK, NORWAY, and SWEDEN, continued.

THERE is a sort of stone found in Sweden, which yields sulphur, vitriol, alum, and minium, whereof Sir Gilbert Talbot has given us the following account. It is ponderous, and of a yellow colour, intermixed with streaks of white, as if composed of gold and silver. It runs in veins among the rocks, on which they lay wood and set it on fire; and when the stone is heated they throw water upon it to make it split, and dig it up with mattocks. They afterwards break it into smaller pieces, and melt it in ovens, in iron pots, which are placed

Vol. VII. B 2 sloping,

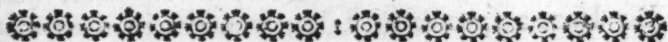
flowing, so that the melted matter may run out of one pot into another set to receive it at the mouth of the oven. This running of the stone is sulphur; and the remaining mass is carried out, and laid on a hill, where it is exposed to the sun and air for two years. It then takes fire of itself, yielding a thin blue flame, scarce discernible in the day-time, and leaving a blue dust behind it; which the workmen observing, they dig it up, and put it into great tubs of water, to infuse for twenty-four hours. The water is afterwards boiled in kettles, and put into cooling tubs, wherein cross sticks are placed, on which the vitriol fastens like sugar-candy. What remains of the water, after the extraction of the vitriol is mixed with an eighth part of urine and the lees of wood-ashes, which being again boiled very strong, and set to cool in tubs, the sticks placed in them are incrustated with alum. In the water that remains after the alum there is found a sediment, which being separated from the water, and burnt in an oven, becomes red, and is the minium wherewith they paint their houses.

In Denmark and Norway are several mines of iron and other metals: and in the island of Iceland is found a fossile, thence called Island Crystal, but very improperly, as it has none of the distinguishing characters of chrystal, and is plainly a body of another class; being a pellucid fissile stone, chiefly dug out of the mountains of Iceland, though likewise to be met with in France and Germany. Its form is very regular, being always an oblique parallelopiped composed of

of six planes ; but its sizes are various, from a quarter of an inch to three inches in diameter, though its most usual standard is about two inches and a half. It is usually found in single masses, except in Iceland, where it is sometimes found in complex masses of a great breadth ; but these are evidently made up of a number of the perfect single specimens, placed side by side in a beautiful and orderly arrangement. This stone has a singular property, of splitting with the same ease either horizontally or perpendicularly ; which is owing to the regular figure, the smooth surface, and nice joining of the several small concretions of which it is composed. Writers on optics have taken much notice of this stone, and its usual phænomena have been accurately examined by Erasmus, Bartholin, Huygens, and Sir Isaac Newton ; but neither its nature or texture seems to have been perfectly understood, most writers have accounted it a chrystal, and Sir Isaac a species of talc ; whereas in reality it is a true and genuine spar, though in brightness it does not fall much short of the purest crystal, being perfectly clear, and very seldom blemished with flaws or spots, or stained with any other colour. The remarkable property of this body, for which it is so famous amongst opticians, is its double refraction ; so that if it be laid over a black line drawn on a piece of paper, the line appears through it double, or two lines appear instead of one, both of the same strength of colour and thickness, and running parallel to one another at a small distance. This effect is best seen through the plain horizontal surfaces

of the stone, and there are some angels in which it is not produced. If a ray of light fall on this stone either perpendicularly or obliquely, it is divided into two by means of the same double refraction; and the like is observed in rock crystal, though in a less sensible degree.

The same kind of stone is found in the isles of Farro, where they have likewise some talc, and two sorts of salt-petre, but in no great quantity. On the sea shore they likewise find a sort of transparent stones, so hard that one may write with them upon glass. Some are white with a small mixture of blue, others yellow, and so well polished that they serve to put in rings. They grow in cliffs of the rocks, from whence they are washed by the waves; but they are not much esteemed.



MOUNTAINS, LAKES, SPRINGS, CATARACTS, *and* WHIRLPOOLS.

THE most remarkable mountain in these countries is a celebrated volcano, called Mount Hecla, situated on the south-east part of the island of Iceland. This volcano not only vomits forth flames, but streams of a sulphureous liquid, which burns like spirit of wine. It also throws up prodigious quantities of black ashes and pumice stones; and it is observable, that the

the eruptions of this mountain scarce ever happen when the wind is at the west. Then the natives who are acquainted with the way, mount up to the very top of the volcano, from whence the flames issue; but this is attended with some considerable danger, especially to such as do not thoroughly know the road: for it is said that the earth, being undermined by the subterraneous fire, sometimes falls in under the least considerable weight. Besides Mount Hecla, there are other Volcanos in Iceland, which are all covered with snow.

From the mountains of Sweden fall innumerable rivers, or rather torrents: but few of them are navigable on account of the rocks and cataracts that obstruct their passage; and these rivers form several great lakes, some of which are eighty miles in length, and upwards of twenty in breadth.

Amongst the lakes of Sweden, that called Vetter is so remarkable in many respects, that it ought by no means to escape notice. It divides East and West Gothland, being in length from north to south above eighty miles, and about eighteen broad in the middle, growing narrower towards each extremity. The water of this lake is very clear, and in some places so deep that it has been sounded with three hundred fathoms of line without finding the bottom. For the most part it is free from rocks, and has but few islands, the principal of which is Visingsöe, lying in the middle of the lake. It is often disturbed

turbed by storms, and sometimes so suddenly, that the surface begins to be ruffled before the least breadth of wind is perceived, so that the cause seems to proceed from the bottom of the waters ; and it is no uncommon thing for boats to be tossed by a storm on one part of the lake, whilst others not far off are in a perfect calm. That such eruptions and agitations of the waters are promoted by subterraneous winds, seems to be confirmed by various phænomena ; for immediately before a storm, and whilst the sky is yet clear, there is perceived a noise like thunder in the lake, which Dr. Hearne tells us he has often heard himself, and which was always followed by a tempest. Of this the inhabitants of Visingfoe are more sensible than any others, for from that part of the island whence the wind will blow the next day, they hear a confused noise like the firing of cannon ; and when this rumbling is heard in the east, it is generally followed by rain and hail. Some people have likewise observed, while the water has been very calm, a great number of little clouds, like so many darts, rising up here and there from the bottom of the lake, which uniting in the air, formed a mizzling rain ; whence it plainly appears, that this is much owing to subterraneous winds. To such winds undoubtedly, together with those from above, we may attribute the sudden thawing of the ice in the spring, which one minute is strong enough to bear horses and sledges, and the next is broken to pieces. The strange grumbling of the waters, which precedes this terrible eruption, warns travellers

to make the best of their way ; but those who happen to be a great distance from land are certainly drowned, or float upon shoals of ice till they meet with relief : and what is still more dangerous, the ice sometimes with the least blast of wind sinks suddenly to the bottom.

The violent under currents of water observed in this lake are also very surprizing, which directly opposing the wind and waves, give the fishermen a great deal of trouble. From these, as well as from its unfathomable depth and subterraneous winds, it is supposed to have a communication under ground with another large lake called Venner, about forty miles to the westward ; and this seems to be confirmed by several whirlpools that lie between these lakes, two of which have been sounded and found of a vast depth. What farther countenances this opinion is, that some years, without any visible cause, the waters increase and decrease again the following years, as several curious persons have observed.

There is a spring not far from the lake Vetter, called the Hungry or Prophetic Fountain, because they say it never has plenty of water but when there is a scarcity of corn the following year. It lies in a valley encompassed with sandy hills, and has this peculiarity, that in a rainy summer it is commonly dry, whereas in the driest summers it sometimes overflows the highway near Vadstein. In 1685, which was a very wet year, this spring was quite dried up ; but the
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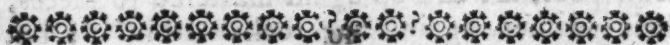
next summer which was not so rainy, it was observed to increase : and in the very dry summer of the year 1705, when all the neighbouring springs entirely failed, this had a plentiful stream of water.

Cataracts, as has been observed already, are frequent in the rivers of Sweden ; but the most remarkable is that within a few leagues of Gottenburg ; where a river, which issues from the lake Venner, falls down a prodigious high precipice into a deep pit, with a terrible noise, and with such violence, that large masts, which are floated down the river to Gottenburg, frequently dive so far under water by the fall, if they happen to pitch endwise, that some are half an hour, others three quarters, and some a whole hour or more, before they rise up again to the surface. Many attempts have been made to find the depth of this hole, into which the river falls here, but without success.

Near the coast of Norway, about 68 degrees of latitude, there is a vast whirlpool, commonly called Maelstrom, and by mariners the navel of the sea, which proves fatal to ships that approach too near it, during the time of flood : for then the sea, upwards of two leagues round, forms such a terrible vortex, that the indraught of the water and the noise of the waves are not easy to be described or imagined ; and during the ebb the water is thrown out with such violence that the heaviest bodies cast into it cannot sink to the bottom, but are tossed up to the surface with
great

great impetuosity. Vessels swallowed by this whirlpool, are cast up again shattered to pieces, being dashed against the rocks within it; but there is an interval between flood and ebb, during which, the water is so still, that ships may sail over it without danger.

There are several whirlpools about the islands of Farro. The most dangerous is that which lies south of Sudero, near a rock called the Monk, where several vessels have been swallowed up. The sea round this whirlpool is eighty or ninety fathoms deep, and the surface of the water is smooth and still: but a little farther in the ground lies at the depth of twenty-five or thirty fathoms, where the sea begins to rise and turn round. Within this, the ground lies from eight to ten or twelve fathoms deep, in four circles; and this high ground rises up in points or cliffs, which are about eight fathoms under water, and about twelve distant from each other. Between these circles are three channels from twenty-five to thirty fathoms deep, wherein the sea runs round; and within all the circles there is a hole, the depth of which in the middle is above sixty fathoms. The innermost current turns round but slowly, but the others with great swiftness. On the south side of this hole the rock called the Monk, rises ten fathoms above water, and north of this there are six lesser rocks, on the top of which the compass runs round like the whirlpool.



S E C T. III.

An Historical Account of the most remarkable public Calamities, which, at different Times, have visited the Inhabitants of Denmark, Norway, and Sweden.

THE island of Northstrand, near the duchy of Sleswick in Denmark, it is said to have been originally separated from the continent by a violent storm : but the time when that happened does no appear. It has, however, at different times, suffered prodigiously by dreadful inundations ; particularly in the year 1300, the little city of Rungholt, with several churches and villages, were swept away by the sea, which also destroyed vast numbers of people and cattle.

On the 2d of November 1532, a dreadful storm arose, in which the whole island was overflowed by the sea, and near two thousand persons perished in the waters ; the year following, another storm damaged the dikes very much ; and from the year 1612 to 1618, there happened annually such inundations as almost depopulated the island.

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On the 11th of October 1634, there arose a storm by which the whole island was laid under water, six thousand persons were drowned, about fifty thousand head of cattle were lost, and the island totally desolated.

The city of Rypen, in North Jutland, has been frequently exposed to the most imminent danger by the tide's flowing into the harbour, with prodigious violence, from the sea : and during the dreadful storm of 1634, which proved so fatal to Norstrand, this city was almost totally laid under water.

Among the mischiefs done by the snow-falls in Norway, the greatest generally is, when a mass of snow, falling from a precipice, overwhelms both men and cattle, oversets boats in the lakes, and which is but too often the case, demolishes cottages, and houses, insomuch that even whole villages are borne down, crushed, and totally destroyed. These snow-falls are of two kinds : the first is when, in frosty weather, the light snow is suddenly set in motion, and in its progress scattered all over the country. This fall of snow is not attended with such damages as the other, which happens when, by the mists and rains in the spring, the consolidated snow falls in a mass, bearing down every thing in its way, even the strongest buildings. By a snow-fall of the first kind, a whole parish in this country, about a century or two ago, was wholly covered, and remains so to this day ; the snow which had thus fallen from the adjacent

mountains, not dissolving the year after, was farther gradually increased and hardened by lying; the situation being high and hemmed in among the mountains.

A calamity which sometimes happens in Norway, is the sudden disruption of a rock; by which great damages are done to the cattle, fields, woods, and sometimes houses and families are involved in the destruction.

In the year 1679 a disruption of this sort happened in the diocese of Bergen, by which many cultivated tracts of land were destroyed, several houses demolished, and 130 persons perished; and all this as suddenly as in other countries by earthquakes.



S E C T. IV.

An Account of the most celebrated Inventions, Discoveries, &c. of the Inhabitants of Denmark, Norway, and Sweden.

AMONG the philosophers of these countries, Tycho Brahe, a nobleman of Denmark, who was born in 1546, appears to be the most celebrated for his knowledge in astronomy; more especially for his catalogue of the

the stars, and that order or arrangement of the heavenly bodies, called from him, the Tychonic system, or hypothesis.

This philosopher, though he approved of the Copernician system, yet could not reconcile himself to the motion of the earth ; and being on the other hand convinced, the Ptolemaic scheme could not be true, he contrived one different from either, and of an intermediate nature between the Copernician and Ptolemaic, or parcipitating alike of them both. In the Tychonic system, the earth has no motion allowed it ; but the annual and diurnal phænomena are solved by the motion of the sun about the earth, as in the Ptolemaic scheme ; and those of Mercury and Venus are solved by this contrivance, though not in the same manner, nor so simply and naturally as in the Copernician system. The Tychonic system then supposed the earth in the center of the world, that is, of the firmament of stars, and also of the orbits of the sun and moon ; but at the same time it made the sun the center of the planetary motions, viz. of the orbits of Mercury, Venus, Mars, Jupiter, and Saturn. Thus the sun, with all its planets was made to revolve about the earth once a year, to solve the phænomena arising from the annual motion, and every twenty-four hours to account for those of the diurnal motion. But this hypothesis is so monstrously absurd, and contrary to the great simplicity of nature, and, in some respects, even contradictory to appearances, that it obtained but

little credit, and soon gave way to the Copernican system.

After this scheme had been proposed for some time, it received a correction, by allowing the earth a motion about its axis to account for the diurnal phænomena of the heavens ; and so this came to be called the semi-tichonic system. But this was still void of the truth, and encumbered with such hypotheses, as the true mathematician and the genuine philosopher could never relish.

The little island Huen, or Ween, lying in the sound, about half a league from the coast of Schonen, was given this celebrated astronomer by king Frederic the Second of Denmark, whose generosity likewise supplied him with money to erect an edifice in the middle of it, and to furnish it with all proper instruments for observing the course and motions of the heavenly bodies. Accordingly, about the year 1576, the noble Dane laid the foundation of a magnificent castle, which he called Uraniburg, or the city of the heavens, and in a few years the structure was compleated, wherein every thing was so well contrived both for pleasure and convenience, and the instruments so excellent for making astronomical observations, that it was looked upon as the finest observatory in the world. Here Tycho composed his catalogue of stars ; but by fate of war between Sweden and Denmark, sometimes the one and sometimes the other being masters of this island, this famed observatory did not subsist above twenty years, and there
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are now scarce any footsteps of it remaining, the ruins having been dispersed into divers places, though part of them served afterwards to build Tycho a handsome seat upon his ancient estate, which to this day retains the name of Uraniburg.

When Dr. Oliver visited the island of Ween, which he says is not above three miles in circumference, he found no remains of Tycho's castle, but part of a circular stone wall, by which the observatory was separated from the other apartments. As to the fine apparatus of this astronomer, the doctor tells us, that most of the instruments are scattered up and down in Germany, though some few were still remaining at Copenhagen when he was there; and in particular he saw in the round tower, Tycho Brahe's own celestial globe, which was six feet nine inches in diameter. This tower, he adds, was built in 1601, near the royal college in Copenhagen, for making astronomical observations, and is above a hundred and fifty feet high. The diameter of the area at top is sixty feet, and the passage up to it wide enough for two coaches, which winding with an easy and almost imperceptible ascent, it sometimes served as a place of parade for the gentry to take the air, as well as for an observatory.

Charles Linnæus, the celebrated naturalist, is a native of Sweden. This great philosopher, who was born 1707, and is now professor of physic and botany, at Upsal in Sweden, is well known for his new and accurate system of na-

tural history ; but more especially for his system of botany, which is now universally followed. The system of botany which is entirely new, is founded on the number and different structure observable in the male and female part of generation of each plant ; the former of which is called stamen, or stamina, when there are more than one of them ; and the latter pistil.



S E C T. V.

*Particular Descriptions of the most remarkable
Public Buildings, and other singular Productions
of Art, in Denmark, Norway, and Sweden.*

THE cathedral of Roschild in Zealand, once the capital of Denmark, and a bishop's see, is an old but stately structure, chiefly noted for being the burial place of the royal family. Here are the tombs of many of the Danish kings, some of which are very magnificent ; and over the altar is a fine piece of gilt and carved work, representing the history of our saviour's passion.

The cathedral of Ryphen is a noble pile, built with free-stone, and covered with lead, and has a lofty square steeple. The marble columns which support its roof, and some royal tombs, are its principal ornaments.

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The cathedral of Aarhus, is of curious architecture, and adorned with many fine monuments of prelates, noblemen, and other persons of distinction.

As to the palaces of the king of Denmark, that at Copenhagen, having been destroyed by fire in 1728, is now rebuilt in a magnificent manner: but the palace of Fredericksburg is the most beautiful and delightful of any belonging to that monarch. This palace stands on an island, in the middle of a little lake, and was formerly a seat belonging to a private gentleman; but king Frederic the Second, being charmed with its situation, bought it, and began to enlarge it, and it was finished by his son Christian the Fourth. The building stands on piles consisting of a very majestic front, and two large wings, which contain several grand apartments. The gallery that leads to the hall of audience, is filled with a fine collection of paintings, most of them brought from Italy; and the hall is adorned with pictures of several of the Danish kings, and of the present royal family, as large as the life. The exploits of some of these monarchs, are also beautifully painted in different parts of the palace, and the great actions of Christian the fourth, are represented in rich tapestry. The chapel is covered with gilt copper, and the inside is embellished with paintings and other ornaments, amongst which are the statues of the twelve apostles in silver; and it is said the locks, bolts, &c. were all of silver, before it was plundered by the Swedes. There is

a fine garden behind the palace, and in the lake they have raised a sort of terrace on piles, which cost a hundred thousand crowns. The neighbouring park is about nine miles long, agreeably interspersed with canals and fish-ponds, and well stocked with fallow-deer from England.

The castle of Gottorp, belonging to the duke of Holstein, is at the same time a fortress, and one of the noblest palaces in these northern countries. It stands to the west of the river Sley, in the middle of a small lake, and is built in the form of an oblong square, and fortified with four bastions of earth. A rampart encompasses the first court, and the gate of the castle is of a fine blue stone, as hard as marble. On the north side of the castle there is a bridge over the lake, two hundred paces in length, and at the end of the bridge, a fine walk between rows of trees leads to the garden, which is adorned with cascades, fountains, and other water-works. In particular there is a large bason or fish-pond with pleasant arbours on the sides of it, and in the middle is a statue of Hercules combating the Hydra, whose head spout out water. On the north there is a parterre in form of a crescent, divided into compartments, and embellished with the busts of several kings and princes. But one of the most curious ornaments of these gardens is a fine globe of copper, ten feet and a half in diameter, with a sphere exhibiting the motion of the sun, and heavenly bodies, which are carried round in exact order by means of certain wheels turned by

by water. Before the house is a level piece of ground, about an hundred and fifty paces long, which is divided into three parts; those on the sides being two fine parterres, and that in the middle having a large bason in the centre, with beautiful water-works. From hence there is an ascent to different terraces, one above another, set round with statues, busts, and other ornaments. From the highest terrace there is a charming prospect. On the left there is a noble orangery or green-house, and in the neighbourhood is a pleasant park, four or five miles in circumference, well stocked with deer.

The royal museum at Copenhagen, contains a noble collection of curiosities both natural and artificial. Dr. Oliver informs us, that this fine collection is preserved in eight chambers, built over the royal library, which is large and well-furnished. One of these rooms is wholly taken up with medals, antique and modern, each sort being kept by themselves, and very judiciously arranged. The series of the modern medals of European nations are absolutely compleat, and those of each nation kept distinctly.

Amongst the natural curiosities preserved in the chambers, one of the most remarkable is a petrified child, the history whereof has been given us at large by Bartholine, Licetus, and other authors. This child was cut out of the mother's belly at Sens in Champagne, in the year 1582, after having lain there between twenty and thirty years; and that it is a human
foetus,

fœtus, and not artificial, is evident beyond all dispute. Its head, shoulders, and belly, are of a whitish colour, and very much resemble alabaster; the back and loins are somewhat brown and harder; but from the hips downwards it is of a red colour, and as hard and perfect stone as can be, exactly resembling the hard sort of stones generated in the bladder. This fœtus, after it was taken from the mother, was first carried to Paris, where it was sold to a jeweller of Venus, who happened to be there, for about twenty pounds sterling; of whom it was afterwards purchased by Frederick the Third, king of Denmark, for sixty pounds, and added to this collection.

In one of the chambers are to be seen two elephant's teeth, each weighing an hundred and fifty pounds, which were dug out of a stone quarry in Saxony.

Here is also an unicorn's horn, as it is called, white as ivory, and spirally twisted. This, however, is not the horn of any land animal, but belongs to a kind of fish called a narval, of which a description has been given already.

In this fine collection there are several large pieces of silver ore, dug out of the mines of Norway in 1666, one of which weighs five hundred and sixty pounds, and is valued at five thousand crowns. Another piece, somewhat less, is valued at more than three thousand; both being so rich, that they are reckoned to contain at least three parts silver. They are composed of

a whitish stone, the cracks or cavities whereof seem to be filled with pure virgin silver, which in some places lies in broad flat plates, and in others like pieces of fine silver lace: but what is most admired in these pieces of ore are the threads or branches of silver which shoot out an inch or two beyond the surface of the stone, appearing in the form of small shrubs or bushes; and several other ramifications of this kind are to be seen among the silver-ores preserved in this Museum.

Here we also find several large pieces of amber, some weighing forty or fifty ounces; which, upon opening the ditches about Copenhagen, when they fortified the city, were found sticking to the sides of old trees that were buried there, like the gum on the plumb-trees in our gardens.

In the same chamber are a great many large branches of white and red coral, and one of black; likewise a pair of stag's-horns growing out of a piece of wood in a surprising manner.

Here is a human thigh-bone, three feet three inches long, as measured by Dr. Oliver himself; and two very large scollop-shells, holding about three gallons each, and weighing two hundred and twenty-four pounds a piece. These were brought from the East Indies; and it is said the fish they belong to is of such strength, that if a man happens to get his arm or leg between the shells when they are open, it clasps them together so forcibly as to cut the limb clear off.

A piece of marble is preserved in this collection which the Lutherans reckon a very valuable curiosity, the natural veins of the stone running in such a manner as to represent the exact figure of a crucifix. Some indeed have suspected the representation to have been by art ; but upon the nicest examination it appears to be entirely the work of nature.

Amongst the artificial curiosities, there is a skeleton made of ivory, two feet six inches high, in imitation of a human one ; and it is so nicely formed and put together, that one might easily take it for a natural skeleton.

There are likewise two crucifixes of ivory, and the whole history of our Saviour's passion beautifully expressed in a piece of carved work.

A small man of war in ivory, with silver guns, is a curiosity much admired ; as is also a watch made of ivory, with all its wheels and movements.

Besides these there are many other curiosities in ivory, ebony, box, amber, and other materials, which are kept for the sake of elegant workmanship : and we are told there is a common cherry-stone, on the surface of which are engraven two hundred and twenty heads, but their smallness makes them appear imperfect and confused.

In this royal repository we find six golden sepulchral urns, which were discovered in the island of Funen in 1685, by a peasant as he was ploughing

ploughing his land, and contained each of them some ashes of a greyish colour. The largest of them weighs two ounces and a half, and the others two ounces and a dram. They are very thin, and each has three rings of gold about its neck, with several circles carved upon the outside of the urn, having one common center. This discovery confirms the account given us by Olaus Wormius and other writers, that it was an ancient custom among the northern nations to burn their dead, and then bury their collected ashes in golden urns.

There is another sepulchral urn of crystal, of a conical figure, which has also a gold ring about it, and was found near Bergen in Norway.

There are likewise in this collection several vessels of different sizes, some of glass and others of earth, which are called lachrymal urns, or lachrymatories, being used by the ancient Romans to catch the tears of weeping friends, which were afterwards mixed with the ashes of the deceased.

We shall conclude our account of this celebrated museum with a description of the Danish and Oldenburg horns, two curiosities which are much admired. The Danish horn is of pure gold, weighs a hundred and two ounces and a half, is two feet nine inches long, and holds about two quarts of wine measure. This horn was accidentally discovered in the year 1639, by

a country girl, in the diocese of Rypen in Jutland, and is undoubtedly a piece of great antiquity, by the figures carved on the outside, which seemed to be hieroglyphics, devils, hobgoblins, &c. Perhaps some of these figures were designed to represent their deities, and the horn was probably used in sacrifices, as amongst the ancient Assyrians and other nations, who upon such solemnities made a great noise with horns and trumpets, and used them to drink out of at their solemn entertainments.

The Oldenburg horn is of pure silver gilt with gold, weighs about four pounds, and is curiously enamelled with green and purple colours. The Danish antiquaries tell many fabulous stories of this horn, which are not worth repeating; and as to what they say of its being given to Otho, earl of Oldenburg, in the year 989, it is plain it cannot be of that date, for the figures and characters on the outside are modern; which however, with the enamelling and other ornaments, are of excellent workmanship, and make it a very fine and valuable curiosity.

The cathedral of Upsal in Sweden, is reckoned the finest church in the whole kingdom. This church is covered with copper, and is adorned with stately monuments of some of the kings of Sweden, and other great persons, whose remains were there deposited. In the chapel behind the altar stands the monument of king Gustavus, in marble, between the statues of his two wives, who are likewise there interred: and
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in another chapel is the tomb of king John's wife, who was the mother of Sigismund the Third, king of Poland. It is of white marble, and of excellent workmanship, which may also be said of the other monuments in general.

The cathedral of Lunden is a magnificent structure, and has a very lofty spire, which serves as a mark for sailors, being seen at a great distance. The altar of this church is a beautiful piece of work; but what most engages the attention of a stranger is its curious clock, which for the number of its movements and figures may vie with those of Lyons and Strasburg. Every hour two horsemen come out and encounter, and a door opens, which discovers the Virgin Mary sitting on a throne, with Christ in her arms, and the magi, with their retinue marching in order, and presenting their gifts, two trumpeters sounding all the time of their procession. This clock, besides the hour, shews the month and day, and every festival throughout the year.

S E C T. VI.

Curious Remains of Antiquity in Denmark, Norway, and Sweden; remarkable Customs of the Inhabitants; with a summary View of the most extraordinary Revolutions among them.

REMAINS of ANTIQUITY, and
REMARKABLE CUSTOMS.

WITHIN a few miles of Sleswick, in Denmark, are still to be seen, in several places, the ruins of a famous wall, which was built by the Danes to prevent the incursions of the Saxons. It is thought to have been begun by Gothofred, king of Denmark, about the year 808, and to have been afterwards improved by Queen Thyra and other Danish monarchs. This rampart was called Dane-work, and like the Picts wall in Great-Britain, is reported to have reached from sea to sea, quite cross that part of Jutland.

At Hollen, in Norway, about fifteen miles from Tonsberg, there is a remarkable church, which is cut out of a rock, and has a burying-place on the top of it. It is undoubtedly very antient and, perhaps, as Olaus Wormius supposes, was originally a heathen temple.

On the tops of the hills, in the island of Sylt, near Sleswick, in Denmark, are found urns of
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a black earth, full of ashes and human bones; whence may be inferred, that the antient inhabitants of these northern countries buried their dead like other nations of antiquity.

The inhabitants of Lapland are, in many respects, a very remarkable people, and far different in their manners and customs from other nations of Europe. With respect to their stature, they are the shortest men in all the north, being seldom above four feet and a half high, and some of them even under that size. Their aspect is generally homely, having a large head, hollow eyes, a broad face, a flat nose, and short black hair. They have broad breasts, slender waists, and small legs, but are very strong, swift, and nimble. The women are somewhat handsomer than the men, having black eyes, and a complexion mixed with a natural red and white, which is not disagreeable. They are superstitious, timorous, and passionate, and have only confused notions of christianity; but they are charitable and hospitable to strangers. Hunting and fishing are their chief, and almost only employments.

The flesh of the rein-deer, their milk, the cheese they make of it, and the fish they take in their seas, lakes, and rivers, are the principal part of their food. Brandy, and other spirituous liquors, they are very fond of; but their usual drink is water, of which they have a kettle always over the fire in winter; and they also drink the broth of fish and flesh boiled together.

In summer they wear a close garment made of coarse wool, of a light grey colour without dying, which reaches down to the middle of their legs; and round them they wear a belt or girdle, at which hangs a knife, and a pouch, wherein they keep their flint, matches, tobacco, &c. Their winter cloaths are the skins of rein-deer, with the hair inwards, of which they also make shoes, boots, caps, and gloves; and the nerves of the animal serve them for thread. The women's apparel is not much different from that of the men; but they have more trinkets hanging to their girdles, such as chains, rings, knives, a needle-case, &c. weighing sometimes twenty pounds.

The habitations of the Laplanders are rather huts than houses, consisting of pieces of timber, or rafters, joined together, and covered with turf, or the branches and bark of pine-trees. They have no chimneys, but a hole at the top of the hut, which serves to let out the smoke, and to admit the light. In some parts of the country they build their storehouses on trees, to secure their provisions from bears and other wild beasts.

The Laplanders, in hunting, make use of bows about three yards long; in handling of which they are very dextrous, being trained up to it from their infancy; insomuch that some of them will shoot an arrow into a circle no bigger than a farthing, at such a distance as they can but just discern it. For the larger sorts
of

of beasts they sometimes use fire-arms and spears, or dig pits for them to fall into : others they take in traps, catch them with dogs, or kill them with poisonous baits. They account the flesh of the bear a great rarity ; and he that kills one is distinguished by laces round his cap, wrought with tin wire ; on which occasion they make great feasting.

When a Laplander has a mind to marry, he looks out for a young woman possessed of a great many rein-deer, in which the riches of these people chiefly consist ; and it is the custom for parents to give their children some rein-deer as soon as they are born, which, with all their increase, belong to them ever after. The more of these animals a maid has, the sooner she may expect a husband ; for the Laplanders do not much regard beauty or other qualifications. As to the poorer sort, they are content to marry a man's daughter who lives in a convenient place for fishing and hunting.

When the suitor goes to pay his first visit to the woman he intends to marry, he is accompanied by some of his friends, one of whom is to negotiate the matter, and carries with him some bottles of good brandy or other spirituous liquor. Being arrived at the hut, they are all invited in, except the suitor, who stays without for some time, till the company have drank round, and his friend has made the proposal to the young woman's parents. The man is then
 4 called

called in, and takes a dram or two with the company, but without seeing the girl, who in the mean time is sent abroad. If the father consents that the young man may pay his respects to his daughter, he goes out of the hut to his sledge, puts on his best apparel, and returns to salute his mistress with a kiss; after which he makes her a present of a rein-deer's tongue, and some other trifles, which she refuses to receive in the presence of her relations, but going out of the hut with him, she accepts them. The lover then desires her to let him sleep near her in the hut; which if she grants, the marriage is as good as concluded; if not, she throws the presents on the ground, as a mark of her refusal. After marriage, the bridegroom is obliged to serve his father-in-law a year, before he takes away his wife and her patrimony of rein-deer; at which time all the friends make presents to the new-married couple.

Soon after a child is born, they wash it with snow or cold water, and then wrap it up in the skin of a hare. The women do not keep their bed above four or five days, and as soon as they have recovered strength, they set out with the child on their back, to have it baptized; for which purpose they are often obliged to take long journies. Their cradles are made of a piece of hollow timber, like a small boat, in which the child is laid on a kind of soft fine moss, and covered over with the tender skin of a young rein-deer. The cradle is suspended
by

by a rope from the roof of the hut, and by tossing it to and fro they lull the child to sleep.

The Laplanders have no physicians among them, nor indeed have they much occasion for any, as they are very seldom afflicted with sickness. For the cure of all inward distempers they make a drink of a certain moss, which they call jerth, or instead of that chew the root of angelica, or boil it in rein-deer's milk. When they feel a pain in any part of their body, they take a kind of fungus, or mushroom, growing upon the birch-tree, and having set fire to it, they apply it burning hot to the part affected; and this occasions a blister, which they imagine draws off all the bad humours. For wounds they have no other remedy but the resin that oozes from the fir-tree; and when they have any member frozen, they run a red-hot iron into a cheese made of rein-deer's milk, and with the fat that drops from it anoint the part, which, by that means, is almost instantly cured.

As to their funerals, if a deceased Laplander was rich, his corpse is wrapped in linen; but if he was poor, he has only a woollen shroud. They put into the coffin, along with the deceased, a flint and steel and a hatchet, which they imagine he may have occasion for in his journey to a place of rest. But this is only the practice of those who are still heathens, or have very gross notions of the Christian profession. The corpse is drawn in a sledge by a rein-deer
to

to the place of burial; after which the creature is killed, to make a funeral entertainment, to which all the friends and relations of the deceased are invited.



REVOLUTIONS *and other* MEMORABLE EVENTS.

THE western Scythians, who had no fixed habitations, but wandered from place to place, with their flocks and herds, for many ages, were the ancestors of the present inhabitants of the ancient Scandinavia, which comprehended Denmark, Norway, and Sweden. When they first fixed their habitations does not appear; nor is it known what kind of government obtained originally in the kingdoms of Scandinavia: but whatever their antient form of government was, we find that these monarchies were sometimes hereditary, and sometimes elective. Sometimes the three kingdoms of Denmark, Norway, and Sweden were under one sovereign, but oftener under three distinct princes, who sometimes governed arbitrarily, and at other times were so restrained by the nobility and clergy, that they enjoyed little more than the name of royalty.

When the kingdom of Denmark was first established is uncertain: but among the antient kings of this country the most famous was Frotho, who, according to tradition, reigned some short
time

time before the birth of our Saviour, and was sovereign of Denmark, Sweden, Norway, England, Ireland, and the neighbouring states. This prince made a conquest of the Vandals, who then inhabited Pomerania and Mecklenburg, and first assumed the title of king of the Vandals.

The first christian king of Denmark was Erick, who reigned about the year 246 of the christian æra. Gormo II. attempted to extirpate christianity, but was compelled by the emperor Henry, surnamed the Fowler, who began his reign in 920, to permit the free exercise of the christian religion in his dominions. Gormo was succeeded by his son Harold, who left the crown to his son Suen, or Sweyn, in the year 980. This prince conquered the greatest part of England; and dying in 1014, his son Canute, surnamed the Great, succeeded him, and was sovereign of England, Denmark and Norway, in which kingdoms he was succeeded by his son Harold, who dying without issue, Hardicanute, the third son of Canute, ascended the Danish throne, and was, at the same time, king of England and Norway, but was the last of the Danish race who had the sovereignty of England.

Upon the death of Hardicanute, Magnus, king of Norway, made himself master of Denmark: but Sueno, of the royal family of Sweyn, recovered that kingdom, and died in 1074.

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He was succeeded by his son Harold VII. who was succeeded by his brother Canute IV. This prince granted the tenths of all the revenues of his kingdom to the clergy, and invested the bishops and other dignified ecclesiastics with great authority ; at which it is said the Jutes were so exasperated, that they assassinated him : but the clergy, out of a sense of their obligations to Canute, placed him among the number of their saints, and his memory was afterwards celebrated in full bowls at their feasts.

He was succeeded by his brother Olaus IV. who died in 1095, and was succeeded by his brother Erick II. upon whose death, the kingdom was involved in a civil war, by means of three competitors to the throne, Sueno III. Canute V. and Waldemar I. who after a long struggle for the whole, agreed to divide the kingdom between them : but Canute being assassinated, and Sueno killed in battle, Waldemar reigned sole monarch of Denmark. He was successful against the Rugians and Vandals, and his son Canute VI. who succeeded him, was long engaged in a bloody war against the Vandals, whom he at length subdued, upon which he assumed the title of king of the Vandals. He possessed himself of the city of Hamburg, and several other places ; he conquered Eithonia and Livonia, and caused the christian faith to be established in these countries.

Upon the death of Canute VI. his brother Waldemar mounted the throne in 1202 : this prince,

prince, besides the kingdom of Denmark reigned over Esthonia, Livonia, Courland, Prussia, Pomerania, Rugen, Mecklenburg, Holstein, Stormar, Ditmarsh, and Wageren, with the cities of Lubeck and Lawenburg ; but in the latter part of his reign, the provinces of Mecklenburg and Pomerania, with the cities of Lubeck and Dantzick, revolted from him. Adolph, earl of Lawenburg, dispossessed him of Holstein, and Stormar ; and the knights of the cross took from him Esthonia and Livonia. He left four sons, Erick V. who succeeded him ; Abel, to whom he had given Sleswick ; Canute to whom he had given Blecking ; and Christopher who had the islands of Laland and Falster. Each of these four princes set up for independent sovereigns in their several appennages ; and Erick, endeavouring to reduce the other three, was murdered by his brother Abel, who succeeded him in the throne of Denmark, but was himself murdered by his subjects after a reign of only two years. To him succeeded his brother Christopher, who happening to engage in some contest with the clergy, was, it is said, poisoned by them with the consecrated host in 1286.

Christopher was succeeded by his son Erick VI. who, having engaged in a war with Sweden, Norway and Holstein, was taken prisoner by the duke of Holstein, and afterwards murdered by the grandees of his kingdom. He left the crown to his son Erick VII. who entered into a war with the king of Norway for protecting the murderers of his father, and had some differences with the neighbouring states. He was

succeeded by his brother Christopher II. in 1319, who caused his son to be crowned king in his life time. Christopher was expelled the kingdom by his subjects, under pretence of being oppressed by taxes, and Waldemar duke of Sleswick was elected to the crown of Denmark; but the Danes soon growing tired of him, recalled king Christopher, during the remainder of whose reign Schonen was conquered by the Holsteiners, and surrendered to Magnus, king of Sweden: the rest of Denmark also was torn in pieces under this reign, and the king remained sovereign of but a small part of it, after whose death there happened an interregnum of seven years, when the kingdom of Denmark was, for the most part, in subjection to the Holsteiners: but the Danes at length called in Waldemar, the son of Christopher II. who, at that time, served in the emperor's court, and who in some measure restored the declining state of the kingdom, but sold Esthonia and Revel to the knights of the cross for 28,000 marks, most of which money he spent in an expedition to the Holy Land.

Waldemar was succeeded by his grandson Olaus VI. in 1375, who was the son of Margaret, the daughter of Waldemar, and of Haquin, king of Norway, after whose death Olaus succeeded to the crown of Norway: he laid claim also to Sweden, his father being the son of Magnus Smech, sovereign of that kingdom; but dying young, both the Danes and Norwegians received his mother Margaret for their queen, who entering into a war with Albert, king

king of Sweden, he was deserted by his subjects, and Margaret became sovereign of Sweden, Denmark, and Norway. Margaret associated Erick of Pomerania in the throne with her, in 1395; and the year following the states of all the three kingdoms, being assembled at Calmar, Erick was declared king; and it was moreover agreed, that Denmark, Sweden, and Norway, should for the future be governed by one sovereign only. Queen Margaret died in 1412, after whose death Erick remained sole monarch of the three kingdoms: but the Danes deposed him, and elected Christopher, duke of Bavaria, his sister's son, for their sovereign, after whose death they chose Christian, earl of Oldenburg, for their king, who reigned over both the kingdoms of Denmark and Norway, and drove Charles Cnuſton, king of Sweden, out of that kingdom; but Charles some time after recovered his crown.

In the year 1471, the emperor Frederick gave him Ditmarsen, and the country of Holstein; and he married his daughter to James the Third, king of Scotland, giving her the islands of Orkney, and Schetland for her dowry, which were before dependant upon Norway. Christian dying in 1481, was succeeded by his son John, who divided Holstein with his brother Frederick; and entering into a war with Sweden, was so successful as to get himself crowned king of that country: but he was soon after driven out of Sweden, and dying in 1513, was succeeded by his son Christian II. who being pitched upon by the Pope to put a decree in execution against

Sweden, he procured himself the crown of that country : but having treacherously massacred many of the Swedish nobility, and exasperated the people, he was driven out of that kingdom by Gustavus Erickson, since which time the Swedes maintained their independency, and have never been governed by a king of Denmark.

Christian having also drawn upon himself the contempt and hatred of the Danes, as well as of the Swedes, on account of his suffering himself to be governed by his concubine, and an old Duthwoman, her mother, was at length deposed and his uncle Frederick, duke of Holstein, advanced to the throne, in 1532. Frederick, dying the year following was succeeded by his son Christian III. who was a great promoter of the reformation, in which being opposed by the bishops, he seized on all the lands and revenues of the church, and adding them to his own, established the reformed religion in his dominions.

To Christian III. succeeded his son Frederick II. in the year 1560, who was engaged in a long war with Sweden, and dying in 1580, was succeeded by his son Christian IV. who was also engaged in a war with Sweden, and afterwards with the emperor, being general of the circle of Lower Saxony, but was defeated ; and the Imperialists possessed themselves of Holstein and Jutland, which were however restored by a peace. The Swedes also dispossessed him of Gothland, Osel, Jemperland, and Halland. This prince, dying in 1648, was succeeded by his son Frederick
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rick III. who, attacking the Swedes at the instigation of the Dutch, was defeated, his whole country over-run by the enemy, and himself besieged in his capital city of Copenhagen. A peace was at last concluded by which he was obliged to yield up to the Swedes, besides Bahus, the fine provinces of Blecking, Schonen, and Halland: but however unsuccessful Frederick was in his wars, he subdued his own subjects, and rendered himself an absolute monarch.

The commons of Denmark, being extremely discontented with the taxes and other oppressions of the nobility and gentry, which they had suffered during a long war with Sweden, concluded that their condition could not be worse under the government of a single person than under a variety of tyrants. The clergy were also no less exasperated than the commons, whom the nobility had deprived of their share of the administration, though they constituted one chamber of the states; and when the commons represented to the nobility, that they had the profits of the lands of which themselves were but the occupiers and farmers, and therefore it was but reasonable they should bear a share in the public taxes for the support of the government, the nobility replied, that they had always been exempted from taxes, and looked upon their tenants to be their vassals and slaves. This was so resented by the commons, that they withdrew from the assembly, and uniting with the clergy, attended the king in a body, and offered him their assistance, in order to render him an absolute monarch. The king

soon joined them, and the nobility being in a fortified town, garrisoned by the king's troops, were compelled to come into the same measures, and pass a law to render their king an absolute monarch. After which, the king received the homage of all the senators, nobility and clergy, in sight of the army and burghers, who were under arms to grace the solemnity, and prevent any disturbance or opposition that might be made to the revolution, which happened in the year 1660.

Frederick III. dying in 1670, was succeeded by his son Christian V. who finding the king of Sweden engaged in a war with the emperor, resolved to take this opportunity of recovering those provinces which Denmark had lost in the last reign; but as the duke of Holstein was an ally of Sweden, the king treacherously seized on all his territories, of which he remained in possession till the year 1689, when the German princes, the English and the Dutch, obliged the king to restore the duke of Holstein to his dominions, of which he remained in possession thirteen years. Christian V. dying in 1699, was succeeded by his son Frederick IV. who was compelled by the maritime powers to conclude a peace with Charles XII. of Sweden, in 1701: but he no sooner heard of Charles's defeat at Pultowa, than he again declared war against Sweden. His first enterprize was the invasion of Schonen, but he was defeated, and compelled to retire back over the Sound; he met however with better success in his invasion
of

of Bremen and Verden, of which he made an absolute conquest. And now the king of Great Britain, as elector of Hanover, concluded a treaty with the king of Denmark for the purchase of Bremen and Verden, which the Danes had taken from the Swedes. About the same time the confederates reduced Stralsund and all Swedish Pomerania, which was put into the possession of the king of Denmark, except Stetin and the territories about the river Oder, which the king of Prussia conquered.

By a subsequent treaty the king of Denmark restored Stralsund, and that part of Pomerania he had taken from the Swedes: but Bremen and Verden were confirmed to Hanover, and the Swedes were obliged to consent to pay toll to the Danes on passing the Sound, as well as other nations. Frederick IV. was succeeded by his son Christian VI. who, dying in August 1746, was succeeded by his son Frederick V. This prince married the princess Louisa, daughter to George II. of England, and died in 1766. His son and successor, Christian VII. who at present holds the sceptre of Denmark, gave the greatest hopes of a prosperous reign; but dark clouds have already obscured the lovely morning, and seem to have deprived his subjects of those fair prospects which were opening before them. We shall now proceed to the history of Sweden.

In the year 1523, while Sweden was subject to the crown of Denmark, Gustavus Erickson, a Swedish nobleman assembling the miners of Dale-

carlia, and others who joined him in order to vindicate the liberty of their country, got together such a considerable force, that he drove the Danes out of Sweden, in gratitude for which service, the Swedes first elected him their king, and afterwards made the crown hereditary in his family. In 1559, Gustavus was succeeded by his son Erick, who was deposed by his brother John, in 1568. John was succeeded by his son Sigismund, who was before elected king of Poland, but Sigismund residing for the most part in Poland, and endeavouring to restore the Roman Catholic religion in Sweden, gave an opportunity to his uncle Charles, the youngest son of Gustavus Erickson, to insinuate himself into the affections of the nobility and other states of the kingdom, who thereupon deposed Sigismund in 1604, and advanced Charles to the throne, by the name of Charles IX. They moreover passed an act, excluding Uladislaus, the son of Sigismund, from the crown of Sweden, because his father refused to have him educated in Sweden, in Lutheran principles, and settled the crown upon Gustavus Adolphus, the son of king Charles, after his father's decease, and upon his heirs male.

Gustavus Adolphus succeeded his father Charles in 1611; and having subdued Ingria, Livonia, and Pomerania, was killed at the battle of Lutzen, near Leipzick, in 1633; leaving the crown to his daughter Christina, in favour of whom her father had prevailed upon the states to alter the act of settlement, which restrained the succession to the male line. Queen Christina was

was but five years of age, when she succeeded to the crown ; the war was however prosecuted in Germany, till the peace of Munster, by which Sweden was confirmed in the possession of the Upper Pomerania, Bremen and Verden, and of several other places in the empire. At length, in 1654, queen Christina, with the consent of the states, resigned her crown to her nephew Charles Gustavus, the fourth son of Casimir, count palatine of the Rhine, and of Catherine the sister of Gustavus Adolphus, and afterwards retired to Rome, having embraced the Roman catholic religion.

Charles Gustavus drove the Danes out of the provinces of Schonen, Smaland, Halland, and Blecking in South Gothland, which were confirmed to him by treaty ; and dying in 1660, was succeeded by his son Charles XI. who also was successful in his wars against the Danes, and to whom the states of Sweden, in 1683, surrendered all the rights and privileges they had not parted with before, by which surrender he became an absolute monarch ; and, dying in 1697, was succeeded by his only son Charles XII. then in the 15th year of his age. In the year 1700, the Poles, Danes, Russians, and Prussians, entered into a confederacy against the young king of Sweden, and invaded his territories on all sides, but the English and Dutch sending a squadron of men of war to his assistance, the Danes were compelled to conclude a peace with him, which gave the young monarch an opportunity of marching against the Muscovites
and

and Poles, whom he defeated in almost every engagement, at the beginning of the war, with numbers very far inferior to those of his enemies, though he had well-disciplined veteran troops of Saxons to contend with, as well as Russians and Poles. He had the good fortune in this war to dethrone the king of Poland, and brought the czar of Muscovy almost on his knees, till, entertaining too great a contempt of his enemies, he ventured to march into the heart of their country, without taking the usual precautions; and being surrounded by the czar's numerous troops, his army was entirely cut off or made prisoners at Pultowa, except three or four hundred horse, with which he escaped to Bender in Turkey, where he resided several years; nor could the Turks force him to return home, till they fired the palace of Bender, which they had assigned him for his place of residence, about his ears.

At length he returned through Germany to Stralsund in Pomerania, where he was besieged by the allies, who began the war against him; and, having defended the town several months, when it was no longer tenable, embarked for Stockholm. He afterwards meditated the siege of Copenhagen; but was prevented by a British fleet, either to frustrate his design of recovering Bremen and Verden from the elector of Hanover, or to disappoint an invasion of Britain, which he was supposed to have designed in favour of the Pretender; upon which he invaded Norway, and laying siege to Fredericksahl,

derickshall, on the frontiers of that kingdom, he was killed in the trenches by a musquet-ball, in 1718.

Charles XII. dying without issue, the crown, according to the right of succession, devolved upon Charles Frederick, duke of Holstein, son of Hedwig Sophia, the eldest daughter of Charles XI. and of Frederick, late duke of Holstein; but the princess Ulrica Eleonora, the youngest daughter of Charles XI. being married to the hereditary prince of Hesse Cassel, who was then general of the Swedish army, and his consort the princess promising to restore the states to their ancient power and privileges, the duke of Holstein was set aside in favour of the princess Ulrica, who, having reigned about two years, resigned the crown in favour of her consort, Frederick, prince of Hesse, who was elected king on the like conditions as she had been advanced to the throne. The queen of Sweden dying without issue, the Swedes elected Charles Peter Ulrick, duke of Holstein Gottorp, son of the elder sister of Charles XII. to succeed to that crown, after the death of his late majesty: but the duke rendering himself incapable of the crown of Sweden, by accepting the reversion of the Russian empire, the Swedes made choice of Adolphus Frederick, duke of Holstein Eutin, bishop of Lubeck. His son, the present king of Sweden, succeeded his father in the year 1771; and, by one of those strange revolutions which decide the fate of kingdoms, he became a despotic prince in 1772, and governs the kingdom by his sole authority.

C H A P. VIII.

Of POLAND, and RUSSIA or MUSCOVY in EUROPE.



S E C T. I.

A general Account of Poland, and Russia or Muscovy in Europe.

THE kingdom of Poland, including Lithuania and Prussia, is situated between 46 and 57 degrees of north latitude, and between 16 and 34 degrees of east longitude. Its greatest length from the frontiers of Pomerania in the west, to the frontiers of Tartary in the east, is about 700 miles; and its greatest breadth, from the frontiers of Livonia in the north, to the Carpathian mountains in the south, is about 680 miles. It is bounded by the Baltic sea and Livonia on the north, by Russia and Little Tartary on the east, by Turkey and Hungary on the south, and by Germany on the west.

Poland contains in the north, the provinces of Courland, Samogitia, Lithuania, Prussia, Warsovia, Polachia, and Polesia.

In

In the middle, Poland Proper, comprehending Great and Little Poland, and Volhinia.

In the south, Red Russia ; and Podolia, Upper and Lower,

Goldingen and Mittau are the chief cities in the dutchy of Courland, subject to its own duke : Rosienne and Midnick, in Samogitia. Lithuania contains the cities Braslaw, Wilna, Polesco, Wiptesk, Troki, and several others. Prussia contains Dantzick, a free city, under the protection of Poland, Elbing, Marienburg, Culm, Thorn, Koningsburg and Memel. Warsovia contains the cities of Warsaw, the residence of the king of Poland, Czersko and Novigrod. In Polachia is the city of Beilsk ; and in Polesia is the city Bressici.

Poland Proper, contains the cities of Posna, Kalish, Cracow, Sandomir, Lublin, and several others of less note. Volhinia contains the cities of Lufec and Bialgorod. Red Russia contains the cities of Chelm, Beldz, and Lemberg. In Podolia are the cities of Caminiec and Braslaw.

The principal rivers in this country are, 1. The Dwina, which runs west from Lithuania, divides Poland from Livonia, and falls into the Baltic below Riga. 2. The Vistula, or Wiesel, which runs eastward from Silesia into Poland, and, after passing Cracow, turns north, runs by Warsaw, and falls into the Baltic at Dantzick. 3. The Worta runs from east to west, and falls

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into

into the Oder at Kustrin. 4. The Wilia rises in Lithuania, runs west by Wilna, and falls into the Baltic near Memel. 5. The Nieper, or Boristhenes, which rises in the province of Moscow, runs west into Poland, then south into Muscovy, at Kiof; from thence it continues its course south-east, and falls into the Black Sea at Oczakow. 6. The Niester, which rises in Red Russia, divides Poland from Turkey, and falls into the Black Sea at Belgorod.

In this country are two archbishoprics, Gnesna and Leopold, and thirteen bishoprics.

The empire of Russia, or Muscovy in Europe, lies between 23 and 65 degrees east longitude, and between 47 and 72 degrees north latitude. Its greatest length from the Frozen ocean in the north, to Trinity city in the south, is about 1500 miles, and its greatest breadth from the confines of Poland in the west, to Asiatic Russia in the east, is reckoned 1100 miles. It is bounded on the south by Little Tartary, and Turkey in Europe; on the west by Poland, the Baltic Sea, and Sweden; on the north, by the Frozen Ocean, and on the east by Asiatic Russia.

This country is divided into the northern, middle, eastern, and western provinces.

The northern provinces are Lapland, Sammoieda, Bellamorenkoy, Meseen, Dwina, Syrianes, Permia, Rubeniniki, and Belascaeda.

In

In this division are the cities of Kola, Golatina, Archangel, Kemi, Meseen, and some others of less note.

The middle provinces are Rezan, Belozero, Wologda, Jereflaf, Tweer, Moscow and Belgorod ; in each of which is a city of the same name, except the province of Belgorod, whose capital is Worenetz, or Veronese.

The eastern provinces are Bulgar, Kasan, Czeremiffi, Little Novogrod, and Don Cossacs : the chief towns are Bulgar and Kasan.

The western provinces are Great Novogrod, Russian Finland, Hexholm, Carelia, Ingria, Livonia, Smolensko, Zernigof, Seefsk, and Ukrain, or the country of the Old Cossacs.

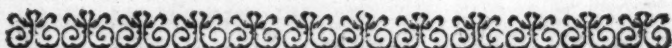
In this division are the cities of Novogrod, Wyburg, Hexholm, Notteburg, Petersburg, now the capital of the Russian empire, Riga, Smolensko, Zernigof, Kiof, or Kiow, with some others less considerable.

The principal rivers are, 1. The Wolga, antiently Rha, the largest and deepest river on this continent ; it rises in Belozaro, bends its course south east, through European Russia, receiving several considerable rivers, then thro' Asiatic Russia, and at last falls into the Caspian sea, below Astracan. 2. The Tobol, which rises in Bulgar, runs north, joins the Irtis, and goes by that name till united with the Oby, and

bears that name till it discharges itself into the Frozen Ocean, opposite Nova Zembla: this river partly divides Europe from Asia. 3. The Mangasea, which runs from south to north, and falls into the Frozen Sea. 4. The Dwina, which rises in Jereślaf, runs north, and falls into the White Sea, below Archangel. 5. The Don, antiently Tanais, which rises in the middle of Russia, runs first south-east, then turns south-west, and falls into the sea of Asoph.

In the Russian empire are four universities, Moscow, Kiow, Chernikow, and Harkow; besides two academies at Moscow and Petersburg.

Here are five metropolites, and fourteen archbishoprics.



S E C T. II.

A particular Account of the most curious natural Productions of Poland, and Russia or Muscovy, in Europe, in the Animal, Vegetable and Fossil Kingdoms; and of other natural Objects of Curiosity.

ANIMALS, VEGETABLES and FOSSILS.

ONE of the most remarkable animals which are natives of these countries, is the Castor, or Beaver. This is an amphibious animal, about

about three feet long, and twelve or fifteen inches broad in the chest and haunches. In the northern regions, the beavers are usually black or brown, but their colour is lighter in more temperate climates. Their ears are small, their teeth strong and sharp, and they have a long scaly tail; which is flat like the blade of an oar, and serves them as a rudder to steer by, especially when they swim under water. Their forefeet resemble those of apes, or squirrels, which they use like those creatures, as hands, when they eat; but their hind feet are adapted for swimming, having membranes between the toes, like ducks, and other water-fowl. The skin of the beaver is covered with two sorts of hair, the one long, the other a soft down, very fine and compact. An attempt was made at Paris, in the last century, to manufacture this down, mixed with wool, into cloths, flannels, stockings, &c. but the project did not answer expectation, it being found by experience that the stuffs lost their dye, when wet, and when dry again, became harsh, and stiff as felts; so that the beaver is now chiefly used in making hats, or as a fur for warmth or ornament.

The beaver has near its anus two bags, or purses, containing a liquid matter called Castoreum, of considerable use in medicine. These bags are about the bigness of a goose egg, and have been falsely taken for the testicles of the animal; but they are found indifferently in males and females. The matter inclosed in these bags is oily, of a sharp, bitter taste, and

strong disagreeable smell ; but when taken from the animal, it dries, and condenses, and becomes of the consistence of wax, by hanging it in a chimney. The Russians cure their castoreum in the following manner : they boil a few wood-ashes in a proper quantity of water, tie the bags in couples, and put them in the boiling water for half a quarter of an hour. This done, they lay the bark of the birch-tree on the fire, and smoke the bags over it for about an hour ; and then letting them hang for a week, or longer, till they are perfectly dry and hard, they pack them up for use or exportation.

Of all the fish that are found in the seas and rivers of the Russian empire, which afford great plenty and variety, the sturgeon seems to be the most worthy our notice, on account of the vast traffic it occasions. The sturgeon is a large sea-fish, which, at its season, runs up the rivers, having a sharp pointed snout, flat belly, and bluish back. They are of various sizes, sometimes fourteen, or even twenty feet in length ; but those of a middle size are reckoned the best. When fresh, they are delicious food ; and to keep them they are salted or pickled in large pieces, and put up in cags, from twenty-five to fifty pounds.

The greatest sturgeon-fishery in the world is at the mouth of the Wolga, where a multitude of hands are employed. The fish are not taken with nets, but in a kind of inclosure formed by huge stakes disposed in triangles, representing the

the letter Z several times repeated ; which being open on the side towards the sea, and close on the other, the fish ascending in the season up the river, embarrass themselves in these narrow angular retreats, and not being able to turn themselves back again, by reason of their bulk, are easily struck, and killed with a sort of harpoon or javelin. It is only the lesser and younger sturgeons that are pickled for eating ; but the great object of this fishery is the roe or spawn of the fish, a commodity as much used in Muscovy as butter in Holland. The roes are cured by salting and drying them in the sun, or by the fire ; and thus prepared, it is called *Cavear*, or *Cavia*, and is sent up the Wolga to Moscow, from whence it is distributed into all parts of the empire, where it is of great service to the people, on account of the several Lents they observe with the utmost strictness. The English import considerable quantities of *cavear* from Russia, but not so much for home consumption, though it has lately been introduced to our tables, as to supply the French and Italians. If good, it is of a reddish brown colour, and very dry. Some eat it with oil and lemon, others with vinegar ; sometimes it is eaten alone with bread, and sometimes only as a sauce or pickle, like anchovies.

The most curious vegetable production in these countries, is supposed to be a sort of melon, growing near Astracan, Casan, Samara, and other places on the river Wolga, called *Borometz* by the natives, and by naturalists the
Scythian

Scythian or Tartarian Lamb, as very much resembling that animal. But later observations have proved, that there is no vegetable with the properties generally ascribed to it, the whole being a deception to impose upon the Turks.

Some of the mountains of Poland afford mines of silver, copper, lead, and iron: but the most considerable of all are the salt mines in the Lesser Poland, which are the chief riches of the country, and make one of the best branches of the king's revenue. These mines are near a little town called Wilizka, a few leagues from Cracow, and have now been opened upwards of five hundred years, being first discovered in 1251. There are several descents into them, the two principal whereof are in the town itself, through which the salt is drawn up; the rest serve to let down timber and other necessaries. Above ground there is a large wheel, turned round by a horse, with a strong rope, as thick as a man's arm; to this is fastened another rope, which a man ties round him in such a manner as to sit in it, and take another person in his lap; whereupon the large rope being let down a little way, a second rope is fastened to it, on which another man seats himself, taking likewise one in his lap; and he being lowered a little, gives place for others to succeed him. Thus thirty, forty, or more, are let down at a time to the depth of a hundred fathoms, where they come to ladders, by which they descend a hundred fathoms lower, the earth in the several passages being

being supported with strong timber. Here a stranger is surprized to find a kind of subterraneous commonwealth, consisting of a great many families, having their peculiar laws and policy, and even public roads and carriages, horses being employed to draw the salt to the mouths of the mine, where it is taken up by engines. These horses, when once they are down, never see the light again; and indeed many of the people seem to be buried alive in this strange abyfs, some being born there, and never stirring out, though others have frequent opportunity of breathing the village air, and enjoying the light of the sun. It also raises a traveller's admiration, to behold in this capacious mine a long series of lofty vaults, sustained by huge pillars of rock-salt cut with the chissel, which, by the light of flambeaus, incessantly burning, appear like so many crystals, or precious stones of various colours, casting a lustre which the eye can hardly endure.

The salt is hewn out of the mine in large cylindrical pieces, the workmen using hammers, pick-axes, and chissels, much as in our stone quarries; which pieces, when drawn up to the top, are broken into fragments fit to be thrown into the mill, where they are ground into a coarse sort of powder, serving all the purposes of our common salt. However, it is proper to observe, that the salt dug here is of three kinds; the first, a coarse blackish salt, the second, a little finer and whiter; the third,
very

very white, and clear as chryſtal, which is properly the ſal gemmæ of the druggiſts, and is frequently uſed for toys, chaplets, little vaſes, &c. But one of the greateſt curioſities of this ſalt-mine, is a rivulet of freſh water running through it, ſufficient to ſupply all the occaſions of its inhabitants, who are not leſs than a thouſand people.

On the coaſt of Pruffia, is found that beautiful and transparent foſſil, called amber, and in ſeveral parts of Ruſſia is found, in great abundance, that ſpecies of talc, known to the ancients by the name of lapis-specularis, and to us, by that of muſcovy-glaſs. It is a beautiful foſſil, of an equal, regular, and elegantly laminated ſtructure; and is uſually found in maſſes, ten or twelve inches in breadth, and from half an inch to three inches in thickneſs. Theſe are of a ſmooth and even ſurface, except at their edges, where the joinings of the various and innumerable plates or flakes of which it is compoſed, make a multitude of thin ridges; which being ſeparated by getting the edge of a knife between them, or other means, the maſs readily ſplits with proper care, into very thin laminæ, of an exceeding brightneſs and transparency. Its colour is a fine clear white, reſembling that of the pureſt white glaſs; but there is another ſtill more elegant ſpecies of this foſſil, called red talc, found in Muſcovy and Perſia, and no where elſe, ſo far as it is yet known; which though reddiſh in the maſſes, is ſeldom brought to us except in ſuch thin plates

as to have no remains of its colour distinguishable.

The large teeth and bones dug up in Siberia, commonly called Mammuth's bones, are one of the greatest curiosities of this country, and have employed the thoughts and pens of Sir Hans Sloane, Dr. Breynius, and other learned men, who make no doubt of their being the teeth and bones of elephants; and in reality, these teeth, or tusks, if not too much corrupted by lying in the ground, are sold and used as ivory all over Russia. In the British museum, is a tusk found under ground in Siberia, which is of a brownish colour, and hollow at the bottom, like other elephants teeth, one of which it plainly appears to be. From the basis, measuring along the outer circumference to the small end, it is five feet seven inches long, and the inner circumference is four feet ten inches. Measuring from the inside of the basis to the small end in a strait line, the distance is three feet ten inches and a half; and at the basis, where thickest, it is eighteen inches round, and six in diameter. This tusk weighs forty-two pounds; but we have credible accounts of some that have been three or four times that weight, and even of some *dentes molares*, or grinders, weighing twenty, or twenty-four pounds a piece.

Ludolphus, in the appendix to his Russian grammar, mentions these teeth and bones among the minerals of Russia; and takes notice that the natives believe them to be the teeth and bones of an animal living under ground, much larger

larger than any that lives upon the earth's surface. He adds, however, that the more sensible among the Russians affirm them to be elephant's teeth, brought thither at the time of the deluge: and he himself, upon examining a piece given him by one of his friends, who had it from a Russian of quality returned from Siberia, found it to be real ivory.

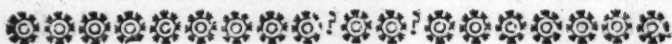
The account of these teeth given us by Mr. Ysbrand Ides, in his travels from Moscow to China, is very particular, the substance of which is as follows. Amongst the hills, says he, which are situated to the north-east of Makoffkoi, the mammoth's teeth and legs are found, and more especially on the banks of the Jeniscea, Lena, and other rivers, quite to the Frozen Sea. In the spring, when the ice of these rivers breaks, it is driven with such violence as to undermine the banks, and occasion part of the adjacent hills to fall down; and thus they discover the teeth of these animals. A person who used to go annually in search of the sebones, accompanied our author to China, and affirmed that he and his companions found the head of one of these creature where such a piece of earth had fallen down, and that with difficulty they broke out the teeth, which grew out of the mouth like those of an elephant. They likewise took some bones of the head, which appeared reddish, as if stained with blood; and afterwards found the fore foot of the animal, the circumference of which was as large as the waist of an ordinary man.

There

There are different reports, continues Mr. Ides, concerning this creature. The Tungusians, Ostiacks, and other heathens say, that the mammoth lives continually under ground, and that they often see the earth heaved up when the beast is upon the march, which afterwards sinks down again, and makes a deep pit or cavity. They also believe, that if he comes so near the surface of the earth, as to smell, or discern the air, he immediately dies ; which, say they, is the reason that several of them are found dead on the high banks of the rivers, where they come out of the ground unawares. This is the opinion of the pagans concerning the mammoth ; but the old Russians of Siberia believe, that there were elephants in that country before the deluge, when the climate was warmer, and that their drowned bodies were driven by the waters into subterraneous cavities, where they have ever since lain frozen, and so preserved from putrefaction.

This account is confirmed by Mr. Laurence Lang, in the journal of his travels to China, whither he went in 1715, with dispatches from his Czarish majesty. He takes notice of these bones, as being found about the river Jeniscea, and towards Mangasea, along the banks in the pits occasioned by the sinking of the earth. He calls them maman bones, and informs us, that some of the inhabitants are of opinion they are no real bones, but a sort of fossil horn which the ground produces ; and that others will have them to be the bones of the Behe-

moth mentioned in the book of Job, the description whereof they pretend is suitable to the nature of the Maman; those words in particular, that he *'is caught with his own eyes,'* as some render the passage, agreeing with the Siberian tradition, that the beast dies upon coming to light.



S E C T. III.

An Historical Account of Fires, Epidemic Diseases, and other public Calamities, which at different Times have visited the Inhabitants of Poland, and Russia or Muscovy in Europe.

THERE is a disease of the hair, almost peculiar to Poland and Lithuania, hence called *plica polonica*, consisting of a preternatural bulk of the hair, which being firmly conglutinated and wrapped up in inextricable knots, and extended to a monstrous length, affords a very unseemly spectacle. When these are cut off the blood is discharged from them, the head racked with pain, the sight impaired, and the patient's life frequently endangered.

This disorder is supposed to arise from the sordid and nasty manner of life, to which these
people

people are addicted, and from an hereditary fault conveyed from the parents, which consists in too great a bulk of the pores and bulbous hairs under the skin of the head : hence the thick and glutinous nutritious juice, produced by their coarse aliments, and impure waters, is by heat forced into these cavities of the hairs, and sweating through their pores, produces this terrible disease.

In the year 1708, the plague raged so at Warsaw, that it is said to have carried off 30,000 of the inhabitants : soon after which, a fire broke out in this city, which continued burning nine days, and almost reduced the whole place to ashes.

In the year 1708, the Lower Volhinia, in Red Russia, was almost totally depopulated by a pestilence.

Fires have frequently made the most horrid devastations imaginable in the city of Moscow, where, in the year 1611, no less than 41,000 houses were destroyed, and a vast number of men, women, and children, perished in the flames. The frequency of such dreadful conflagrations in this city, two parts in three of which have been often burnt down, is supposed to be occasioned by the structure of the houses, which, for the most part, are little cabbins, built of wood.

In the year 1702, one half of the city of Astracan was burnt down to the ground; and about sixteen years afterwards, two thirds of it were again consumed by fire.



S E C T. IV.

An Account of the most celebrated Inventions, Discoveries, &c. of the Inhabitants of Poland, and Russia or Muscovy in Europe.

THE illustrious astronomer, Nicolaus Copernicus, the reviver of that system of the world, called from him the Copernican System, or Hypothesis, was born at Thorn, in Prussia, in the year 1472. In this system the sun is supposed at rest in the center, and the planets with the earth, are supposed to move in ellipses round him. The sun and stars being thus supposed at rest, that diurnal motion which they appear to have from east to west, is imputed to the earth's motion from west to east, round its axis.

This system was received of old by Philolaus, Aristarchus, and Pythagoras, from which last it had the name of the Pythagoric system: it was also held by Archimedes; but after him it became neglected, and even forgotten for many

many ages, till it was revived by Copernicus, about the year 1500.

According to this hypothesis, the sun is supposed very near the center of gravity of the whole system, and in the common focus of every one of the planetary orbits: next him, Mercury performs his revolution around him; next Mercury is the orbit of Venus; and next to Venus, our earth, with its attendant or secondary, the moon, performing a joint course, and in their revolution measuring out the annual period. Next the earth is Mars, the first of the superior planets; next him Jupiter, and the last of all Saturn. These and the comets are the constituent parts in the solar system, which is now received and approved as the only true one, for the reasons following.

1. It is most simple, and agreeable to the tenor of nature in all her actions; for by the two motions of the earth, all the phænomena of the heavens are resolved, which, by other hypotheses, are inexplicable, without a great number of other motions contrary to philosophical reasonings.

2. It is more rational to suppose, that the earth moves round the sun, than that the huge bodies of the planets, the stupendous body of the sun, and the immense firmament of stars, should all move round the inconsiderable body of the earth, every twenty-four hours.

3. But that harmony, which, upon this supposition, runs through the whole solar system, wonderfully confirms this hypothesis, viz. that the motions of all the planets, both primary and secondary, are governed and regulated by one and the same law, which is, that the squares of the periodical times of the primary planets, are to each other as the cubes of their distances from the sun; and likewise the squares of the periodical times of the secondaries of any primary, are to each other as the cubes of their distances from that primary. Now the moon, which, in the Copernican system, is a secondary of the earth, in the other hypothesis is a primary one; and so the rule cannot take place, because the periodical time, considered as that of a primary one, does not agree therewith.

4. Again, this single consideration, Mr. Whiston thinks enough to establish the motion of the earth for ever, viz. if the earth does not move round the sun, the sun must move, with the moon, round the earth. Now the distance of the sun to that of the moon, being as 10,000 to 46, and the moon's period being less than 28 days, the sun's period would be found no less than 242 years, whereas in fact, it is but one year.

5. The sun is the fountain of light and heat, which it irradiates through all the system, and, therefore, it ought to be placed in the center, so that the planets may, at all times, have it in an uniform and equable manner.

6. For

6. For, if the earth be in the center, and the sun and planets revolve about it, the planets would then, like the comets, be scorched with heat, when nearest the sun, and frozen with cold in their aphelia, or greatest distance, which is not to be supposed.

7. If the sun be placed in the center of the system, we have then the rational hypothesis of the planets being all moved about the sun, by the universal law, or power of gravity arising from his vast body, and every thing will answer to the laws of circular motion and central forces ; but otherwise we are wholly in the dark, and know nothing of the laws and operations of nature.

8. But happily we are able to give not only reasons, but demonstrative proofs, that the sun does possess the center of the system, and that the planets move about it at the distance and in the order assigned.

The first is that Mercury and Venus are ever observed to have too conjunctions with the sun, but no opposition, which could not happen unless the orbits of these planets lay within the orbit of the earth.

The second is, that Mars, Jupiter and Saturn have each their conjunctions and oppositions to the sun alternate and successively, which could not be, unless their orbits were exterior to the orbit of the earth.

In

In the third place, the greatest elongation or distance of Mercury from the sun, is about 28° , and that of Venus 47° ; which answers exactly to their distance in this system, though in the Ptolemean system they might, and would sometimes, be seen 180° from the sun, viz. in opposition to him.

Fourthly, in this disposition of the planets, they will all of them be sometimes much nearer to the earth than at others; the consequence of which is, that their brightness and splendor, and also their apparent diameters, will be proportionally greater at one time than another; and this we observe to be true every day. Thus the apparent diameter of Venus, when greatest, is near $66''$, but when least, not more than $9''$ and a half; of Mars, when greatest, it is $21''$, but when least, no more than $2''$ and a half; whereas, by the Ptolemean hypotheses, they ought always to be equal.

The fifth is, that when the planets are viewed with a good telescope, they appear with different phases, or with different parts of their bodies enlightened. Thus Venus is sometimes new, then horned, and afterwards dichotomized, then gibbous, afterwards full, and so increases and decreases her light in the same manner as the moon, and as the Copernican system requires.

The sixth is, that the planets, all of them, do sometimes appear direct in motion, sometimes

times retrograde, and at other times stationary. Thus, Venus, as she passes from her greatest elongation westward, to her greatest elongation eastward, will appear direct in motion, but retrograde as she passes from the latter to the former; and when she is in those points of greatest distance from the sun, she seems for some time stationary. All which is necessary upon the Copernican hypothesis, but cannot happen in any other.

The seventh is, that the bodies of Mercury and Venus, in their lower conjunctions with the sun, are hid behind the sun's body, and in the upper conjunctions are seen to pass over the sun's body, or disk, in form of a black round spot, which is necessary in the Copernican system, but impossible in the Ptolemean system.

The eighth, and last, is, that the times in which these conjunctions, oppositions, stations, and retrogradations of the planets, happen, are not such as they would be were the earth at rest in its orbit, but precisely such as would happen were the earth to move, and all the planets in the periods assigned them; and therefore this, and no other, can be the true system of the world.

While Copernicus was reviving the Pythagoric system, and labouring to explain and establish it, some of his friends objected, that, supposing it true, that is, supposing the sun at
rest

rest in the center of the universe, and the earth moving round it, the planet Venus must needs undergo the same phases with the moon: to whom he is said to have replied, that posterity would probably discover that it did so. This prophecy of Copernicus was fulfilled by the famous Galileo, who first made the discovery with the telescope; for which, however, he was thrown into prison, by Pope Urban VIII. and could not regain his liberty till he had renounced the testimony of his senses. The like treatment, it is probable, Copernicus would have met with, had he survived the publication of his hypothesis; and it is likely that he had very great apprehensions of a treatment of that kind; for when, by the importunity of his friends, this great man was prevailed upon to publish his work, *de Revolutionibus Orbium Cælestium*, a copy of it was no sooner brought to him, than he was presently seized with a violent effusion of blood, which put an end to his life on the 24th of May, 1543; and several have been ready to impute this sudden change, as he had all his life enjoyed a good health, to the anxiety and terrors he was under, from the offence which he knew he should give to the bigotted part of the world,

This great man was, for some time, professor of mathematics at Rome, where he made many astronomical observations about the year 1500; and he was afterwards made canon of Worms, by his mother's brother, Lucas Wazeldorius, bishop of that place,

S E C T,

S E C T. V.

Particular Descriptions of the most remarkable public Buildings in Poland and Russia.

MOST travellers agree, that many of the churches, and other public buildings, in Poland, are beautiful and magnificent; but in the description of them they are not so particular as might be expected. The principal church at Warsaw, dedicated to St. John the Baptist, is a noble fabric, and richly adorned; besides which there are several others worth observation. The palace in that city, where the kings of Poland usually reside, and the general dyet of the kingdom assembles, is a large square pile of buildings, begun by Sigismund III. and enlarged and beautified by his successors. The king has another palace in the suburbs, amidst delightful groves and gardens, and not far from it there is a small chapel erected in memory of a victory gained over the Muscovites, in which there is a fine sepulchral monument of Demetrius Suiscius, great duke of Muscovy, who being taken prisoner, died a captive in Poland.

In the city of Cracow there are several magnificent structures, and particularly the castle, which is a mile in compass, wherein the king has a noble palace built of stone, having a
square

square court within it, and galleries running round the outside supported by marble pillars. The royal apartments are adorned with fine paintings and statues, and from the north gallery there is a charming prospect over the neighbouring country. Within this castle stands the cathedral dedicated to St. Stanislaus, a majestic structure, wherein the kings of Poland are crowned and usually interred, and where are preserved the relics of that saint, the antient bishop and patron of the nation; who being murdered in this church in the eleventh century by Boleslaus the Bold, the king and nobles walk in procession to his shrine the day before the coronation, to expiate the crime; and several kings have offered vessels of gold and silver at his tomb. Sigismund I. built a silver altar over it, with golden crucifixes; and to the priests who serve at it he gave many rich vestments embroidered with jewels.

The cathedral of Gnesna, formerly the metropolis of the kingdom, and now the see of an archbishop, who is primate of all Poland, is a fine antient fabric, and is remarkable for its gates of Corinthian brass exquisitely wrought, which, it is said, belonged formerly to a Greek monastery in the Morea, and were brought from thence by king Boleslaus II. In this church there is a vast treasure of gold, silver, and curious enamelled vessels, given to it by several kings and archbishops. The tomb of one of its prelates, viz. St. Adelbert, was cased with silver by Sigismund III. and archbishop Firley added

added to its treasure many costly vessels and vestments, particularly his own mitre, valued at two thousand pounds sterling.

The city of Posna has also a stately cathedral, dedicated to St. Magdalen, where they shew the tomb of duke Mieceflaus, who introduced christianity into Poland. It has likewise several other handsome churches, and a large town-house of excellent architecture; but no building of that kind in the kingdom is equal to the town-house of Thorn, which is reckoned one of the finest in Europe.

The city of Dantzick is adorned with many noble structures, particularly St. Mary's church, which is remarkably grand and beautiful. It has several thousand windows, forty-eight altars, and a font made at Antwerp, which cost about five thousand pounds sterling. The town-house is also magnificent, and has a lofty spire, but this and other fine buildings were much damaged by the bombs and red-hot balls of the Russians, when they besieged Dantzick under count Munich, in 1734, in order to drive out king Stanislaus and his adherents, who had taken shelter in that city.

In the city of Moscow there is a stately church, called the Jerusalem, which is said to be such an extraordinary pile of building, that the czar John Basilides, in whose reign it was erected, ordered the eyes of the architect to be put out, that he might never contrive or behold

its equal. There are several other magnificent churches in the same city, particularly that of St. Michael, which stands within the walls of the castle, and is adorned with the tombs of the czars or great dukes of Muscovy. On the right side of the altar is the czar's throne, and on the left that of the patriarch; and in the body of the church hangs a chandelier of immense weight and value. The very jewels and other ornaments that enrich a picture of the Virgin Mary are valued at half a ton weight of gold; besides a vast number of statues, chalices, and other utensils of gold and silver, finely wrought, and set with precious stones, a great many rich sacerdotal vestments and an immense quantity of donatives offered to the relics of three eminent Russian saints which are here interred; so that the treasure of this church is said to be equal, at least, to that of any cathedral in Europe.

The tombs of the princes who never reigned are in a separate chapel; and the princesses of the blood are interred in a neighbouring monastery of nuns, which is a noble structure.

Next to the churches of Moscow we may reckon those of Petersburg, especially the cathedral, which is a magnificent edifice, built by the direction of an Italian architect.

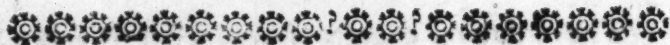
That of Nisi-Novogrod is a stately pile, entirely built of stone, having fine cupolas, after the model of that of Santa Sophia at Constantinople.

tinople. These cupolas are painted with a shining green varnish, and the tops of them are adorned with neat small crosses.

The cathedral church of Wologda, is an ancient and majestic structure; it has five cupolas covered with tin, and crosses on the tops of them finely gilt, which, when the sun shines upon them, make a glittering appearance. Besides this, there are twenty other stone churches in that city, and above forty more built of timber.

As to the imperial palaces, there are two noble ones at Moscow, the one of timber, the other of stone, and built after the Italian manner, as is also the fine palace at Petersburg. Her czarish majesty's pleasure house, called Petershoff, being built by the czar Peter the Great, stands on the coast of the gulph of Finland, between Cronslot and Petersburg, and is one of the best buildings in the northern parts of Europe. The house stands on a rising ground, is furnished after the Dutch manner, and adorned with beautiful paintings. Large vessels can come up to it by means of a long and deep canal, cut from thence to the sea, which was dug in two months time, and furnishes a large reservoir about three miles distant from Petershoff, where there is a curious water-engine, erected by a Dutchman. Not far from Petershoff are two other pretty seats, which are almost encompassed with basons, fish-ponds, fountains, cascades, &c. all supplied with water from the great reservoir just mentioned,

and forming a most elegant and delightful prospect.



S E C T. VI.

Remarkable Customs and Traditions of the Inhabitants of Poland and Russia, with a summary View of the most extraordinary Revolutions among them.

CUSTOMS and TRADITIONS.

THE nobility of Poland have horse and foot guards, and centinels at their gates day and night: it is said, that a nobleman of Poland has frequently 5000 guards: and that formerly it was not unusual to see a nobleman with 10,000 guards. The nobility wear a vest down to the middle of the leg, a long robe lined with fur, girded about with a sash, furred caps, little boots with iron heels, and a sabre by their side; and when they ride, they have a short cloak furred on both sides.

Guests, when invited to dine at another person's table, must carry their spoons, knives, and other such implements with them, and even their linen if they would be cleanly. The masters reach meat from the table to their servants,

vants, who eat it as they stand behind their chairs ; and the master of a feast is reckoned a miser if he does not make his guests drunk.

The peasants of Poland have no property, and are such absolute slaves, from one generation to another, that they are sold as appurtenances to go along with the estate. Their habit in winter consists of sheep-skin with the wool on the inside, and in summer they wear a close-bodied coat of a coarse stuff ; they wear the rind of trees, folded round their legs, for boots, and use the thicker bark for soles ; they cut their hair close like monks ; shave their faces all but their whiskers ; and when abroad, they carry a pole-ax in their hand, and a sabre by their side, hung by a strap of leather, to which are fastened a knife in a sheath, and a small stone to whet the knife.

The Polish ladies are reputed very modest ; and they are so submissive to their husbands, that they ask them on the knee for every thing they want. Ladies of fashion seldom go abroad, but in their coach and six, attended with a great number of servants ; and particularly an old gentleman for their usher, and an old gentlewoman for their governante, with dwarfs of both sexes to bear up their train. The ladies wear silk caps, furred like the men's caps ; and it is observed, that there is no country, in which the dress of the ladies comes nearer to that of the men than in Poland.

The wedding feasts of the gentry are very expensive, and generally last three days; on the second of which all the guests make presents to the bride; the boors daughters do not marry till twenty-four or thirty years of age, and till they have worked several baskets full of cloth of different sorts, which the bride distributes among the bridegroom's friends at the wedding. The funerals of persons of quality are so pompous and magnificent, that they appear more like triumphs: the corpse is carried in a hearse or chariot, drawn by six horses, all covered with black; the coffin has a large black velvet pall over it, with a cross of red sattin in the middle, and six long black silk tassels, supported by six of the deceased's domestics in close mourning. Several priests, monks, and others, walk before the hearse with wax tapers, and immediately before it ride three men on horseback, who carry the arms of the deceased, one his sword, another his lance, and the third his dart; and as soon as the funeral service is over, they ride furiously into the church, break the arms of the deceased upon the coffin; and the body being interred, there is a feast, in which both the clergy and laity drink to excess. When a woman of quality mourns, she wears a coarse black stuff; her linen is not much finer than canvas; and the greater the quality of the deceased, the coarser are the mourning weeds.

By the laws of Poland, the estate of the father is equally divided among the children: the people are remarkably chaste; and the young
women,

women, in particular, very coy; and their mothers keep such a strict eye over them, that they make them wear little bells before and behind, to give them notice where they are.

In some parts of Samogitia, particularly in the desarts, part of the old pagan idolatry still remains, and the inhabitants worship a four-footed serpent. About the end of October the men, women, and children, meet at an appointed place, where, a cloth being spread upon straw, several loaves are set in a certain order, and between every two loaves is a large pot of beer: then beasts of various kinds, both male and female, are brought in and sacrificed, after which a bit is cut off from every part of the sacrifice, and being scattered through the room, the company are entertained with meat and drink.

The Muscovites are extremely fond of baths and sweating houses, in which they constantly go once or twice a week, and with so little regard to decency, that women and men make no scruple to go into them promiscuously, and to appear naked there to each other.

The Muscovite women are reckoned very dutiful to their lordly husbands, and very patient under their correction and discipline; they are even represented as fond of it, and uneasy and even outrageous under the want of it, as implying a want of love and regard in their husbands, who sometimes use it with so little discretion,
that

that their wives die under their correction ; and yet there is no punishment provided by law against this severity ; though if a woman happens to kill her husband, which is often the case, in return for his severity, she is condemned by the law to be buried alive : this dreadful punishment consists in being put into the earth in a standing posture, and covered with it only up to the neck, so that some of them live six or eight days in hunger and misery ; it being forbid, under pain of death, to afford them any kind of sustenance. Nay, there is so little gallantry or decency used towards the fair sex in Russia, even to women of quality, that the only chance they have of living comfortably in wedlock, is from the care their parents and relations take by their marriage contracts, to bind the husband under some sort of penalty, to forbear all unreasonable correction, and other ill-treatment : but all these precautions often prove so ineffectual, that it is not without reason they crown the bride, on her wedding-day, with a garland of wormwood, to put her in mind of the bitterness that attends the married state, and the bridegroom with one of hops, to intimate to him the fruitfulness of it, which is there of so much consequence, that the husband may divorce his wife, and shut her up during her life, for the very fault of not bearing him any children.

Whether the custom of the bride's presenting her spouse with a whip of her own manufacturing, on her wedding-day, in token of submission,

mission, be still observed in Russia, does not appear; but there is authority sufficient to believe this to have been a custom which formerly obtained in that country.

According to the Muscovitish laws, bigamy is permitted, though seldom practised; it being regarded as a mark of incontinence for a man not to be contented with one wife. When a man has taken a fancy to a woman, he sends her, or her parents, if she lives with them, a present, according to their rank; if the present is accepted, he goes to them on the next day, and the matter is agreed on and finished out of hand; but if the present be returned, it is looked upon as a denial, and he must look out somewhere else for a wife.

The Czeremisse Tartars are reckoned the wildest of all the Tartarian tribes; they have no towns, and their houses are only a number of wretched huts; they live chiefly on wild honey, the milk of their cattle, and the game that they kill. Some are Mahometans, but the greatest part are perfect idolaters, worshipping the sun, moon, and several living creatures. The inhabitants of the country of Vogulizi, in Eastern Muscovy, acknowledge a supreme being, to whom they sacrifice, once a year, some of their best cattle, and one of every sort; they believe a future life of rewards and punishments, but will not bear being told, that there are any devils, or other malevolent spirits: they bury the dead in their best cloaths, and always with
some

some money in their pockets : their wives they buy of the parents or other relations, and marry as many as they can maintain.



REVOLUTIONS *and other* MEMORABLE EVENTS.

THE name *Poland* is said to be derived from the Sclavonian word *Pole*, which signifies *plain* and *even*, as is the face of this country. Some derive it from *Polachi*, which signifies the *posterity of Lechus*, who is held to be the founder of this monarchy. In the time of the Romans, Poland was known by the name of *Sarmatia Europæa*, and afterwards by that of *Sclavonia*, from the *Sclavi*, a people who either expelled, or mingled themselves with the *Sarmatæ*.

The *Sarmatæ*, who were called also *Veneti*, or *Vandals*, having left their seats to possess themselves of those more desirable countries, Italy, France, and Spain, were, as is generally believed, succeeded by their neighbours the *Tartars* and *Russians*, who erected several small governments, which were at length united in *Lechus*, who, like the neighbouring princes, took upon himself no other title than *duke*, and is said to have begun his reign about the year 550.

Cracus,

Cracus, the founder of the city of Cracow, began his reign about the year 700, and left two sons and a daughter, who all three succeeded in their turns to the throne; but dying without issue, the Poles chose one Lescus, a goldsmith, for their sovereign; upon whose death they elected another Lescus, a peasant, to reign over them. In the family of Lescus II. the sovereignty continued for four generations, till the death of Popiel II. when one Piaſtus, a wheelwright, was elected. In his posterity the government continued several hundred years; and in the year 999, duke Boleslaus Chrobry, with the concurrence of the pope and the emperor of Germany, assumed the title of king, and conquered Bohemia, Moravia, and Prussia.

King Boleslaus was succeeded, in the year 1025, by his son Miecislaus, to whom succeeded his son Casmir, in 1034, who conquered Masſovia; and, in 1059, was succeeded by his son Boleslaus II. who added Red Russia to the crown of Poland, by his marriage with the princess Vicislava, heiress of that duchy. This prince is charged with having led a vicious course of life; and it is said that, being for that reason refused the communion by the bishop of Cracow, the king cleft his skull with a sabre before the altar; upon which the pope excommunicated him, and he was at length obliged to fly into Hungary, with his son, and was succeeded in the throne by his brother Uladislaus, in 1082. To him succeeded his son Boleslaus III. in the year 1103, who was one of the bravest and
most

most successful princes that ever reigned in Poland.

In 1140, Boleslaus was succeeded by his son Uladislaus II. but, in 1146, deposed by his brother Boleslaus IV. whose son Miecislaus III. succeeded to the crown in 1174, and was deposed by his brother Casimir, who mounted the throne in 1178, and made an entire conquest of Prussia. This prince made Dantzick a royal city; and in 1195, was succeeded by his son Lescus V. but Lescus was driven out of the kingdom by his uncle Miecislaus III. who re-ascended the throne; and dying in 1203, Uladislaus Laconogus was advanced to the crown, but resigned it to Lescus V. in whose reign it was, that the Tartars made the first incursions into Poland, and that the knights of the Teutonic order were first introduced into Prussia by the pope, for the service they had done in the holy wars; the Prussians being then Pagans, the pope claimed a right to dispose of their country.

After a succession of five kings, Casimir the Great mounted the throne of Poland in the year 1333, and is said to have instituted the civil government of that kingdom, and introduced the laws of the Teutonic order, called the laws of Magdeburg. This prince being the last surviving male of the family of Piastus, appointed his sister's son Lewis, king of Hungary, to succeed him, who came to the crown in 1370, when the Poles procured several limitations and
restraints

restraints upon the prerogatives of their kings, who had hitherto been vested with an almost absolute power. Lewis dying in 1382, was succeeded by his daughter Hedwigis, who married Uladislaus, great duke of Lithuania, by which match that dutchy became united to Poland.

Uladislaus V. was succeeded by his son Uladislaus VI. in 1435, who also accepted the crown of Hungary, and was for some time very successful in his wars against Amurath the Turkish emperor, but at length defeated and killed in the field of battle; and, having no children, was succeeded by his brother Casimir IV. in 1446. This prince entering into a war with the Teutonic knights, who endeavoured to render Prussia independent of the crown of Poland, a treaty was at length concluded between these powers, by which it was agreed, that all that part of Prussia, which lies west of the river Weisel, should be subject to the crown of Poland, and that the eastern parts should remain subject to the Teutonic knights, provided the grand master took an oath of fealty to the king of Poland, as his vassal. It was in this reign that the representatives of the several palatinates or provinces were first called to the diet, or assembly of the states, the legislative power being lodged in the king and senate before this time.

In the reign of Sigismund, who came to the crown in 1507, Luther's doctrine, tending to a
I reformation,

reformation, began to spread itself in Prussia and other parts of Poland, particularly in the city of Dantzick, which the king was in no condition to prevent, being engaged in a war with the knights of the Teutonic order; but these differences being at length referred to the mediation of the emperor Charles V. and Lewis, king of Hungary, it was determined that Sigismund should relinquish to their great master, the marquis of Brandenburg, all the eastern part of Prussia; and that the marquis of Brandenburg, as duke of Prussia, and his heirs, should swear fealty to the crown of Poland. Sigismund dying in 1548, was succeeded by his son Sigismund II. in whose reign the Russians invading Livonia, the southern provinces put themselves under the protection of Poland, and the northern provinces called in the Swedes to defend them, which was the occasion of long wars between those powers.

Henry of Valois, duke of Anjou, being elected king of Poland, in 1573, abdicated that crown the year following, on his succeeding to the crown of France; whereupon Stephen Batori, prince of Transylvania, was elected king of Poland. This king established the supreme courts of justice for civil causes, and dying in 1587, Sigismund III. the son of John, king of Sweden, was elected to the crown of Poland, on condition of his renouncing the protestant religion; and in 1632, was succeeded by his son Uladislaus VI. who invaded Russia, and took the capital city of Moscow, obliging the
Russians,

Russians to relinquish their pretensions to the dukedoms of Smolensko and Zernikow. He was also very successful against the Turks ; and the Cossacks were humbled by him ; but dying, without issue, in 1648, his brother, John Casimir, who had entered himself of a religious order, and was a cardinal, succeeded to the crown.

In this reign, the Cossacks, being oppressed by the Poles, put themselves under the protection of the Turks and Muscovites, and for many years united their forces with the one or the other, in ravaging Poland. In 1655, Charles Gustavus, king of Sweden, made an entire conquest of Poland, all except Dantzick, and obliged Casimir to fly for refuge into Silesia ; but the Swedes retiring next year, Casimir was restored, whereupon he raised an army of thirty thousand Germans, to secure his possession of the throne ; but the Poles apprehending that he intended to make himself absolute, deposed him ; upon which he retired into France, and became abbot of St. Germain, in 1670.

In 1663, the crown of Poland acknowledged Ducal Prussia to be independent of that kingdom, on condition that it should revert to the crown of Poland, on failure of male issue ; and in the year 1700, Frederick III. duke of Prussia, first assumed the title of king of Prussia.

The next king of Poland was Michael Corubuth Wisnoweiski, of the family of the Great dukes of Lithuania, in whose reign the Turks over-ran Podolia, reduced Caminieci, and laying siege to Leopold, the Poles agreed to pay an annual tribute to the Grand Signior, on condition the Turks would raise the siege, which was complied with. The Polish general, John Sobieski, indeed afterwards obtained a signal victory over the Turks, notwithstanding which, great part of Podolia still remained in their hands; and king Michael dying some few days before the victory over the Turks, the Poles, in their next choice, considering the merits of their general, elected him for their king in 1674. This prince was a younger son of James Sobieski, castellan of Cracow, and had raised himself by his merit to the post of general of the crown. He made two campaigns, and gained several considerable advantages over the Turks, before he was crowned; but the most glorious action of his life was his raising the siege of Vienna, when it was upon the point of being taken by the Turks, in 1683.

John Sobieski dying in 1696, Frederick Augustus, elector of Saxony, was chosen king of Poland, in opposition to the prince of Conti, who was proclaimed king by the French faction, but obliged to retire into France; and, in 1699, at a treaty between the Turks, on the one part, and the Germans and Poles, on the other, at Carlowitz, the Turks restored Podolia, with the city of Caminieci, to Poland.

After

After which, the Poles insisted that the king should send back his Saxon troops to Germany, which not being complied with, the diet came to a resolution that the gentry should mount on horseback, and drive the Saxons out of the kingdom: the king however found means to retain those forces, by representing that they were necessary to oppose the Swedes in Livonia; and in the year 1700, the king entered into a confederacy with the Danes, Russians, and Brandenburgers, against Charles XII. king of Sweden, in which war Augustus was defeated in several battles by the Swedes, who at length deposed him, and advanced Stanislaus Lesinski, palatine of Posnania, to the throne of Poland, in the year 1704.

The king of Sweden afterwards pursued king Augustus into Saxony, reduced all that electorate, except Dresden, and raised vast contributions. King Stanislaus remained on the throne of Poland until the year 1709, when Charles XII. being defeated by the Russians at Pultowa, and obliged to take refuge in Turkey, king Augustus re-ascended the throne of Poland, though he had sworn not to disturb Stanislaus in the possession of it. He kept a considerable body of Saxons about him, to prevent another revolution; and his allies, the Russians, lived at discretion in Poland for many years, plundering and ravaging the country, under pretence of arrears due to them, for their service against Sweden, which occasioned a misunderstanding between king Augustus and the czar of Muscovy.

In the year 1724, the populace at Thorn, the inhabitants of which are mostly protestants, having insulted a popish procession, the magistrates and several citizens were condemned to die, by commissioners sent from the court of Poland to inquire into the affair, for not suppressing the tumult. In behalf of the magistrates most of the protestant powers in Europe interposed, threatening to revenge their death in case the sentence passed upon them was put in execution: but the treaties of Vienna and Hanover happening to engage the attention of most of the powers in Europe at this time, the unfortunate citizens of Thorn were executed.

King Augustus II. dying in 1733, his son Augustus III. was advanced to the throne of Poland by the interest of the Austrians and Russians, though the French faction had proclaimed king Stanislaus, who, retiring to Dantzick, was besieged in that city by the Saxons and Russians; and, escaping from thence, retired into France, upon which his party submitted, and swore allegiance to king Augustus, who dying the 5th of October, 1763, Stanislaus Poniatowski, rather on account of his personal merits than any pre-eminence of birth and family, was unanimously elected king of Poland, under the name of Stanislaus Augustus. The power of this prince is at present reduced almost to nothing, the emperor of Germany, the empress of Russia, and the king of Prussia, having, by virtue of a treaty signed by these three formidable powers, entered Poland,

land, and divided the greater part of the kingdom between them.

The Russes are supposed to be descended from the ancient Scythians, or Tartars, a wandering people without any fixed habitation ; and it is said, that the name *Russe* implies a *wanderer*. Kiow, the capital of the Ukrain, was the first city they built, and there they first fixed the seat of their monarchy. Their sovereign Wolodimir, having extended his conquest very far to the eastward, laid the foundation of the city which still bears his name, about the year 1000, and removed the seat of the empire thither ; and marrying the daughter of the Greek emperor Basilus Porphyrogenesta, professed himself a christian, and introduced the Greek religion into Russia. Many more of the Tartar hords left their rambling life, about the same time, and fixed themselves in that country denominated at this day Russia or Muscovy ; their respective leaders assuming the power of sovereign princes : but the Russes, being the most potent tribe, made the rest dependent on them. The Tartars, however, of Cassan, Astracan, and other eastern countries, apprehensive of the growing power of the Russes, entered into a confederacy against them, in the year 1237, and, after a war of some continuance, obliged the Russes to become tributary to them : and they continued subject to the kingdom of Cassan and Astracan upwards of two hundred years.

The

The Russians, at length, having thrown off the Tartar yoke, removed the seat of government to Moscow; and duke John Basilowitz, who began his reign in 1450, united the several states and principalities of the Russians, and added the dutchies of Novogrod and Twere to his dominions, as his son did the dutchies of Pleskow and Smolensko: but John, or Jvan Basilowitz, his grandson, who began his reign in 1540, made the greatest addition to the Russian empire, for he conquered the kingdoms of Cassan and Astracan, and was first acknowledged sovereign of that vast tract of country, called Siberia, which extends eastward as far as China. This prince did not only make very considerable foreign conquests, but subdued the vassal Russian princes, and perfectly destroyed the constitution, which he could not effect, till he had caused several of the tributary princes, with their families, to be massacred, and seized on their territories, from whence he obtained the name of the tyrant.

John Basilowitz was succeeded by his son Theodore, who marrying the sister of Boris Theodorowitz Gadinow, his brother-in-law, Boris, murdered both him and his brother Demetrius, and usurped the throne. He had, however, reigned but a very little time, before a certain monk, named Griska Utopia, personated the murdered Demetrius; and, being supported by the Poles, made himself master of some considerable places in Russia, upon which the usurper Boris died of grief; and notwithstanding

withstanding the nobility proclaimed the usurper's son. Theodore Borisiwitz, the pretended Demetrius, entered Moscow in triumph, and was crowned great duke of Russia. The pretender, having then strangled the young Theodore and his mother, married the daughter of a Polish palatine, and promised to introduce the Roman Catholic religion, and to prefer the Poles, who had assisted him, which gave such a general disgust to the Russians, that, while he was solemnizing his marriage with the Polish princess, they fell upon his guards, and, having made their way to his apartment in the castle, murdered him; and Zuski, one of the conspirators, who was allied to the former royal family, mounted the throne.

But there arose still another counterfeit Demetrius, who, being assisted by the Poles, deposed Zuski, shaved his head, and shut him up in a monastery. This impostor, however, being discovered, the Russian nobility, who were under the power of the Polish army, consented that Uladislaus, son of the king of Poland, should be their sovereign: but having soon after entered into a conspiracy to drive the Poles out of Russia, the Polish general set fire to the city of Moscow, and, falling upon the Muscovites, before they were ready to receive him, it is said that no less than 200,000 of them perished in the flames, or by the sword; and almost the whole city was laid in ashes. The Polish general, however, came to a treaty with the Russians, and agreed to march out of
the

the country, carrying with him a prodigious treasure into Poland, of which the army had plundered the Russians, during the fire at Moscow.

Soon after, in the year 1613, Michael Theodorowitz, descended from the emperor John Basilowitz, and son of the patriarch, was acknowledged by the Russians for their sovereign. He was succeeded by his son, Alexis Michaelowitz, in 1645. To this prince the Cossacks, or Czercaffes, who inhabit the Ukrain, submitted themselves; and many of the Calmuck, Circassian, and Georgian princes, afterwards submitted to the Russians. Alexis Michaelowitz dying in 1675, was succeeded by his son Theodore Alexiowitz, who, dying without issue in 1682, was succeeded by his two brothers, John and Peter, jointly: but Peter, under a pretence that there was a conspiracy on foot against his life, retired to the fortress of Troitza, some miles distant from Moscow, summoned the nobility thither in 1689, declaring he had very narrowly escaped the hands of the conspirators; and having also summoned the guards to attend him, he extracted, by means of torture, a confession from some of them, that there was a plot formed to murder him, his wife, his mother, and all his near relations; that the prime minister Gallitzin, and his half-sister the princess Sophia, were in the conspiracy; which real or pretended plot so wrought on the people, that the czar Peter found no difficulty in disposing of those who were not in his interest as he thought fit;

fit; he therefore shut up his sister Sophia in a monastery, and banished Gallitzin, with his family, to Siberia.

The czar Peter, afterwards surnamed the Great, reigned jointly with his elder brother John, until the year 1696, when John died, leaving three daughters, the princess Catharine, married to Charles Leopold, duke of Mecklenburg Schwerin; the princess Anne, married to Frederic William, duke of Courland; and the princess Proscovia. Peter, the first year he became sole monarch of Russia, laid siege to Asoph, near the mouth of the river Don, and took it from the Turks; and thus, having opened a passage into the Black Sea, he designed to have built a royal navy, and to come in for a share, at least, of the navigation with that of the Turks; and accordingly sent to most of the maritime kingdoms in Europe for ship-builders, offering great encouragement to such as would come into his country, and assist in building a fleet. He soon afterwards travelled into Holland and England, taking several young noblemen and gentlemen with him from Russia, to learn the art of navigation, as well as that of ship-building. The czar, while he was in England, wrought with his own hands in the king's yard at Deptford, and made his noble retinue handle the axe. He endeavoured to get some knowledge of every other art and science, and carried persons of all professions back with him, with a promise of great encouragement.

The

The czar Peter, having concluded a truce with the Turks in the year 1700, declared war against Charles XII. king of Sweden, after entering into a confederacy against that prince, with the kings of Denmark, Poland, and Prussia: but he was very unfortunate in the beginning of that war, having been defeated by the king of Sweden as he lay before Narva, with an army of 100,000 men, losing all his cannon and baggage; though the Swedish army did not amount to above 20,000 men: however, the czar obtained a victory over the Swedes in Livonia in 1702, and took Marienburgh, and several other towns. In Marienburgh it was that the czar met with his second spouse, the lady Catharine Alexiowna, whom he took from a Swedish officer on the day she was married, at the wedding dinner before her husband had bedded her, as is generally reported in Russia. However that be, the czar married her; and though an obscure woman of mean extraction, agreeable to his last will, she succeeded him in the empire.

The czar having obtained a decisive victory over the king of Sweden at Poltowa, in the Ukrain, in 1709, soon after made an entire conquest of Livonia, deposed Stanislaus, king of Poland, and replaced Augustus on the throne of that kingdom. The Turks having broke the truce with the Russians in 1711, the czar entered Moldavia, in hopes of being joined by Mazappa, their general, with a great body of troops; in which being deceived, he was surrounded

rounded by the Turks on the banks of the Pruth; and, after a battle which lasted three days, was obliged to purchase a peace, and agree to deliver up Asoph, and all the places he held on the Black sea. Being returned home, and joined again by his northern allies, he reduced Swedish Pomerania in 1713; and in the year 1714, his fleet defeated that of Sweden in the gulph of Finland. In 1715, he established the Academy Marine, at Petersburg; and, in 1716, the patriarch of Muscovy dying, he caused himself to be declared head of the Greek church, seized all the lands of the patriarchate, and several of the monasteries, and added them to his own demesnes.

In the year 1717, the czar visited France, and particularly the academy of sciences; invited ingenious men of every profession to accompany him to Russia, offering them great encouragement to instruct his subjects. Returning to Petersburg in 1718, he ordered his only son, the czarowitz, to be tried for a conspiracy against him in his absence, and procuring him to be condemned, the young prince died in prison.

The czar having made himself master of Finland, he invaded Sweden itself, destroying their copper and iron works, and burning and plundering the country in a terrible manner; upon which Ulrica, queen of Sweden, offered him terms of peace; and in the year 1721, it was at length agreed, that Livonia, Ingria, Care-

lia, and the district of Weyburgh, in Finland, should be confirmed to Russia. About this time the czar took upon himself the title of emperor of all the Russias, and he was afterwards acknowledged as such by all the powers of Europe.

The czar, taking advantage of the civil wars in Persia, made himself master of several provinces in that kingdom in the year 1722, particularly the south-west coast of the Caspian sea. About the same time he caused the senate, great officers of state, and the nobility, to take an oath of fidelity to him; and to swear, that they would obey whomsoever he should nominate for his successor. In 1724, he caused the empress Catharine, his royal consort, to be crowned, and the states of the nation, both ecclesiastical and civil, to swear allegiance to her; and dying in a few months after, the empress Catharine ascended the throne of Russia.

The empress Catharine dying, after a reign of two years, Peter, a minor, grandson of Peter the Great, and son of the czarowitz, who died in prison, was advanced to the throne of Russia by the appointment of the late czarina: but this prince dying soon after, was succeeded by the empress Anne, daughter of the emperor John, and widow of William, duke of Courland. This princess was obliged to relinquish to the Turks, all the conquests made by Peter the Great on the Black sea; and to restore to the Persians all the acquisitions made by the
same

same prince near the shore of the Caspian sea; and dying in October, 1740, was succeeded by John, the son of Anthony Ulrick, duke of Brunswick Wolfenbuttle, and of Anne his wife, daughter of Charles, duke of Mecklenburg, and the princess Catharine, who was daughter of the late czar John, elder brother to Peter the Great.

During the minority of the young emperor, who was scarce six months old at his accession, count Biron, duke of Courland, had been nominated regent by the late czarina; but the princess Anne, the emperor's mother, imagining she was better intitled to the regency, ordered the duke of Courland to be tried for high treason, and condemned to die; however, she was content with banishing him to Siberia, after which she assumed the regency; but she did not enjoy it long; for the Russian guards and generals of the army, conspiring with the princess Elizabeth, youngest daughter of Peter the Great, proclaimed her empress on the 5th of December, 1741, and made the infant emperor, with his father and mother, the duke and duchess of Brunswick Wolfenbuttle, prisoners, together with count Munich, and Osterman, the chancellor. The two last were condemned to die, and led into the place of execution; but their sentence was changed to banishment in Siberia.

The czarina Elizabeth, soon after her accession, invited Peter Federowitz, the young
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duke

duke of Holstein, son of her elder sister, into Russia, declared him her heir, and gave him the title of grand duke of Russia; upon which he relinquished his pretensions to the throne of Sweden, to which also he was next heir, and professed himself of the Greek church. On Sept. 1, 1745, he married the princess Catharine Alexiowna, of Anhalt Zerbst, who was born the 2d of May, 1729, and by whom he had issue Paul Petrowitz, grand duke of Russia, born the 1st of October, 1754.

Soon after the accession of Elizabeth, a war broke out between Russia and Sweden, in which the Swedes were frequently defeated, and the Russians made an entire conquest of Finland, most part of which they relinquished, however, at a succeeding treaty, retaining only Weyburg, and some other territories east of the river Key-men. In the year 1756, the empress Elizabeth entered into a confederacy with the queen of Hungary and the elector of Saxony, against the king of Prussia, whose dominions she invaded with a powerful army, which was attacked in their intrenchments by the Prussian general, M. Lehwald, with an army of 30,000 men, and handled so roughly, that they soon after abandoned the kingdom of Prussia, and retreated into Poland.

On the 25th of August, 1758, the king of Prussia attacked the Russian army on the frontiers of Poland, and after an action, which lasted near twelve hours, entirely defeated them;

15,000

15,000 Russians were left dead on the field of battle, and their military chest and all their artillery were taken. But the following year, the Prussian general Wedel, having attacked the Russians at Zulichau, was repulsed with great loss, and the Russians made themselves masters Franckfort upon the Oder: however, his Prussian majesty in person having joined Wedel with 10,000 men, and the Russians having been reinforced with 12,000 cavalry, the battle of Cunnersdorf was fought, on the 18th of August, with great fury and obstinacy on both sides; the Prussians left 20,000 men dead upon the field, and the Russians, who were the conquerors, lost at least 10,000 men.

On the 5th of January, 1762, the empress Elizabeth, dying at Petersburg, was succeeded by the grand duke, Peter III. who began his reign with several popular measures; and resolving to procure a general peace for Europe, immediately upon his accession, concluded a suspension of arms with the king of Prussia, which was soon afterwards followed by a peace between those two monarchs: but on the 10th of July, 1762, the emperor was dethroned, and the empress his spouse proclaimed sole and reigning empress of all the Russias, by the name of Catharine II. upon which the several orders, ecclesiastical, civil, and military, took the oaths of fidelity to her Imperial majesty, and to her son the great duke Paul, as her lawful heir. This extraordinary revolution was brought about by the following principal circumstances: the em-

peror had been for several days at his country seat at Oranjebaum, and the empress at Petershoff. On the 9th of July, early in the morning, the empress arrived at Petersburg, where the senate had assembled; and after solemn deliberation, determined that Peter III. should be deposed. In the mean time, the empress repairing to the palace, assembled the guards, who proclaimed her sovereign of all the Russias, and declared Peter to be deposed. After this proclamation was made, the new sovereign went to church, where, after divine service, all the grandees of the empire took the oath of fidelity to her; to whom she declared, that she had taken the reins of government purely for the good of the country. After the necessary precautions had been taken, the empress, dressed in the uniform of the guards, mounted her horse, and putting herself at the head of 10,000 men, marched to Oranjebaum, where she seized the emperor, who was put into a coach, and conducted to Petershoff, where he died eight days after he had been deprived of his throne, as was given out, by a violent cholic.

C H A P. IX.

Of TURKEY in EUROPE.

S E C T. I.

A general Account of Turkey in Europe.

TURKEY in Europe comprehends antient Greece, justly famed for learning and laws, though at present subject to the despotic government of the grand seignior, and no inconsiderable part of his dominions. It lies in the south-east part of Europe, between 17 and 40 degrees east longitude, and between 36 and 46 degrees north latitude.

Its greatest length from the coast of Dalmatia, in the west, to the confines of Little Tartary, in the east, is about 1000 miles; and its greatest breadth, from Chotzin in Moldavia, in the north, to cape Caglia in Morea, in the south, is 900 miles. This country is bounded on the north by Sclavonia, Hungary, Poland, and Russia: by the Black Sea, the Propontis, Hellespont, and Archipelago, which divide it from Turkey in Asia, on the east; and by the Mediterranean and the Gulph of Venice, on the south and west.

Turky

Turky is divided into the following provinces; Walachia, Moldavia, Basserabia, Buziac Tartary, Little Tartary, and Crim Tartary, north of the Danube; Bosnia, Servia, Bulgaria, south of the Danube; Dalmatia, the republic of Ragusa, Albania, and Epirus, the antient Illyricum, on the Gulph of Venice; Romania, formerly Thrace, Macedonia, Thessaly, Achaia, Boeotia and Morea, or the antient Greece, in the south-east.

The chief cities in this country are, Tergovisco, in Walachia; Chotzin, Jazy, and Falcxin in Moldavia; Bender in Basserabia; Ockakow in Buziac Tartary, Bachiseria, and Kaffa in Little Tartary; Kirtz and Belberg in Crim Tartary; Seraio, Belgrade, Semandria, Nissa, and Ibar in Servia; Widin, Nicopoli, Silistria, Scopia, and Bulham, in Bulgaria; Drino and Narinzo, in Dalmatia; Ragusa, in Ragusa; Durazzo and Dulcigno, in Albania; Chimera and Butrinto, in Epirus; in Thrace are the city of Constantinople, the metropolis of the grand seignior's dominions, and the cities Philippopoli, Adrianople, and Heraclia; Strymon and Contessa, in Macedonia; Salonichi, in Thessaly; Imania, Larissa, Athens, Thebes, and Lepanto, in Achaia; Elis, Patras, Corinth, Olympia, Argos, Romania, Lacedemon, or Mistria, Coron and Modon, in Morea.

The chief mountains in this country are, the Iron-Gate Mountains, Rhodope, Mount Athos,

thos, Chimæra, Parnassus and Helicon, and Pelion.

The principal rivers are the Nieper and the Danube, whose courses have already been described.

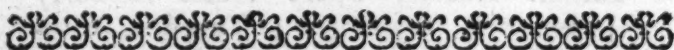
The most considerable of the Grecian islands in the Archipelago and Levant, are Negropont, the antient Eubæa, where Aules formerly stood; Lemnos, Stalemene; Tenedos, Skyros, or Scirio; Mytelene, or Lesbos; Scio, or Chios, Samos, Patmos, Delos and Paros; Cerygo, Santorin, Rhodes, Candia, formerly Crete, and Cyprus, with a great many others less considerable.

The air of this country, though from its situation it may appear very temperate, is not healthy; its inhabitants are frequently visited by the plague, which sweeps off great numbers of them, but might be less fatal, if their religious opinions would suffer them to observe the reasonable precaution of not visiting in families where it prevails.

The country is very advantageously situated for trade; more so, perhaps, than any other in Europe, on account of the rich merchandize of the east, with which the Turks might, by means of the Black Sea, the Levant, and the Mediterranean, supply all Europe; but this they entirely neglect.

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The soil is very fruitful, producing, in great abundance, corn, wine, oil, myrrh, frankincense, and a variety of odoriferous plants and drugs. Though the people labour under great disadvantage from their government, which inspires them with a spirit hurtful to trade and manufactures, yet they take care to employ their Christian slaves in making carpets, cottons, and different sorts of silks.



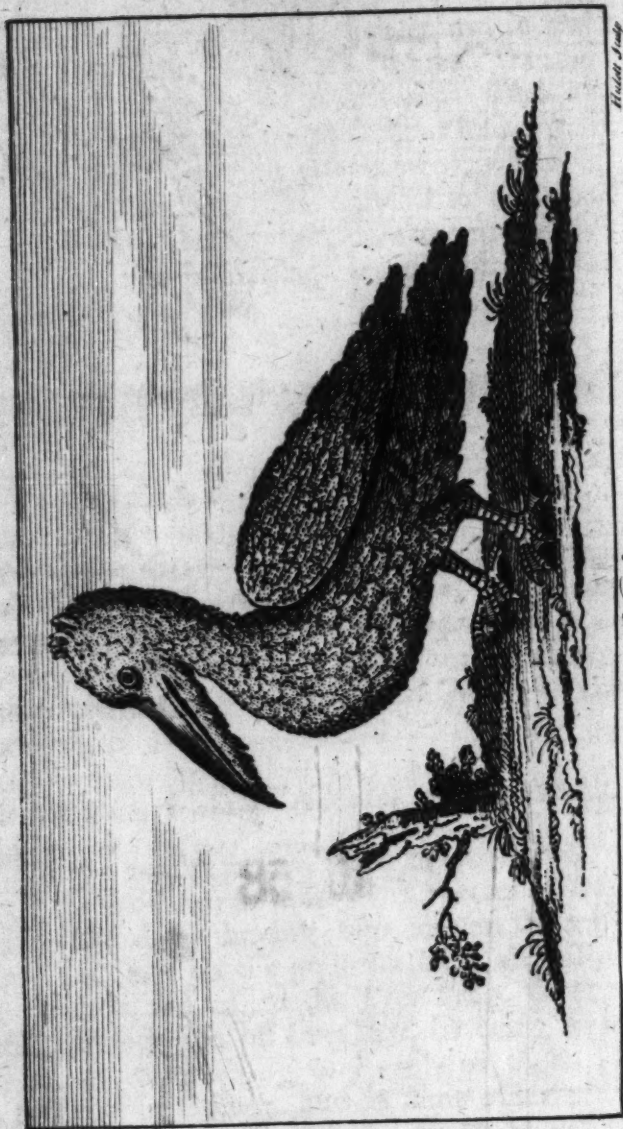
S E C T. II.

A particular Account of the most curious natural Productions of Turkey in Europe, in the Animal, Vegetable, and Fossil Kingdoms; of remarkable Mountains and Caverns; of Rivers, Volcano's; and of other natural Objects of Curiosity.

ANIMALS, VEGETABLES, and FOSSILS.

OF the quadrupeds of these countries, one of the most extraordinary is a species of frog, distinguished by having four toes on the anterior, and five on the posterior feet, all hollow at the end, and called the Tree Frog, from its being seldom seen off trees, and its being formed by nature for living very easily on them. It is frequent in Greece, and in some other countries; and it lives on trees and plants of various kinds, but particularly on those which have large

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W. H. Stimp

A Pelican

large leaves. The post of these creatures is generally on the under side of the leaf, where they are hid from the birds, that otherwise would devour them : they are usually quiet by day ; but as soon as night comes on, they are seen incessantly hopping from branch to branch, and catching insects. The body of this creature is about an inch and an half long, and three quarters of an inch in diameter, somewhat rounded, and the back in particular very convex : it is of a beautiful bright and glossy green, but has on each side a longitudinal streak of yellow ; the head is obtusely pointed ; the eyes are large, black, and glossy ; they stand prominent, and have a yellow circle round them ; the legs are slender ; the hinder ones considerably long ; the toes are of a very peculiar form or structure ; they are rounded and hollow, opening at the extremities in the manner of the mouth of a leech. It is by means of this peculiar mechanism in this part, that they are able to hold their place on the leaves ; and they are so well constructed for this, that they will instantly fasten the animal on a plate of glass, or of the most highly polished metal : the creature leaps very nimbly, and to a vast distance.

Among the birds common in the Levant, one of the most extraordinary is the Pelican, a very large and extremely singular bird, which feeds upon fish and water-insects : the beak is enormously large, of a strangely singular figure and structure ; it is a foot, and sometimes seventeen or eighteen inches in length, and towards the

the base is of the thickness of a man's wrist : it is in this part of a dusky lead colour, but with a faint tinge of yellow, especially towards the sides ; and it is also yellowish again at the tip ; the upper chap is broad and depressed, the under chap is formed of two horny ribs, separate at their base, and joined at their extremity, and connected by a thick membrane of a yellowish colour, which is continued not only along the beak, but beyond its base, down to the throat, near the entrance of which is joined a bag of a skinny substance, which, when it is empty, and the bird's mouth shut, shrinks together like a bladder before it is blown, and is scarce to be seen ; but when filled, it stretches to an incredible bigness, so as to contain ten or a dozen quarts of water. In this bag, it is said, the creature carries fish and water to its young in the mountains, where it breeds. The head of the Pelican is naked at the sides, from the angle of the beak quite up to the eyes ; the feathers on its crown resemble a crest ; they are of a whitish grey, and the whole bird is also of the same colour, except in some very few places ; the tail is about six inches long ; the legs are short, and very robust ; the feet are broad and webbed. The bird, upon the whole, is one of the most singular in the world ; it has at first much the general appearance of the swan ; but the addition of so enormous and strange a beak to a bird of that kind is so perfectly out of the course of what might have been expected, that it startles and surprizes every body. The Pelican is said to live to a great age.

Among the many curious plants to be found in European Turkey, is the tragacanth, which grows in several parts of the Levant, particularly on mount Ida in Candia, and is a genus of the *Deadelphiea Decandria* class of Linnæus, with a papilionaceous flower; the fruit is a short bilocular pod, of a roundish figure, and containing a few kidney-shaped seeds.

Gum-tragacanth, or as some call it, gum-adragant, or gum-dragon, is the produce of this shrub which grows to about four feet high, and has a firm and robust stem, with numerous branches. The gum is brought to us in long and slender pieces, of a flatted figure, more or less, and these not strait, or rarely so; but commonly twisted and contorted various ways, so as to resemble worms. We sometimes meet with it like the other vegetable exsudations, in roundish drops, but these are much more rare. It is moderately heavy, of a firm consistence, rather tough than hard, and extremely difficult to powder, unless first carefully dried, and the mortar and pestle kept warm. Its natural colour is a pale whitish, and in the cleanest pieces it is something transparent. It is often, however, met with of a brownish tinge, and of other colours, and more opake. It has no smell, and very little taste, but what it has is disagreeable. Taken into the mouth it does not grow clammy, and stick to the teeth, as the gum-arabic does, but melts into a kind of very soft mucilage. It dissolves in water but slowly, and communicates its mucilaginous quality to a

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great quantity of that fluid. It is by no means soluble in oil or spirituous liquors, nor is it inflammable. It is brought to us from the island of Crete, and from several parts of Asia. It is to be chosen in long twisted pieces, of a whitish colour, very clear, and free from all other colours; the brown, and particularly the black, are wholly to be rejected.

The island of Candia likewise affords plenty of the *Cistus Labdanifera*, the *Ledon* of Dioscorides, a shrub yielding an odoriferous sort of gum, called *Labdanum*, which oozes out of the leaves like a fatty dew, in shining drops, as clear as turpentine. This shrub is full of branches, and rises to the height of two or three feet, bearing a flower an inch and a half in diameter, consisting of five rose-coloured leaves, marked with a yellow speck in the middle. From the centre of these leaves arise a great many yellow threads or chives, which surround the pistil; and when the flower is gone the pistil is changed into a fruit or pod, containing abundance of small angular seeds, of a red colour, and disposed in five different vessels. The chief branches of this shrub are about the thickness of one's little finger, and are divided into sprigs bearing leaves that grow by couples, of a dark green, and waved at the edges. The gum issuing from the *cistus* is gathered in hot calm weather, in the months of July and August, by brushing it off the leaves with a sort of whip, composed of a great number of lashes or straps, to which the *Labdanum* sticks when they are

are dragged over the shrub, and from whence it is afterwards scraped and made up into a mass or cakes of different sizes. Dioscorides tells us, that in his time they used to comb off the Labdanum from the beards and thighs of the goats which fed upon the leaves of the cistus; but it is now gathered in the manner above mentioned, as M. Tournefort relates, who saw the country people employed about it, and says the work is rather unpleasant than laborious, as it must be done in the heat of the day, and when there is no wind stirring; and yet the purest labdanum is not free from filth, because of the dust blown upon it in windy weather. Besides this, to increase its weight, they have a trick of mixing it with a fine blackish sand; which cheat is discovered by chewing it, or straining it after it is dissolved.

We have another gum obtained from a plant called *Panax Herculea*, a sort of All heal, which grows plentifully in Achaia, Bœotia, and other parts of Greece, and may be seen in the gardens of the curious. From incisions made in the stem of this plant, especially near the root, during the summer-months, a juice flows, which concretes spontaneously, and is called in the shops *opopanax*. If good, it is externally of a yellow colour, but internally white, or somewhat inclining to yellow, of a bitter taste, a strong smell, and pinguious consistence.

We ought not here to omit taking notice of a very useful production of the vegetable kind, viz. the Cotton-bush, which is an annual plant, cultivated in Greece, and in several of the islands of the Archipelago, as well as in many parts of Asiatic Turkey, the East-Indies, and other countries. This plant grows as high as a rose-bush, has leaves like maple, and puts out yellow flowers, which leave behind them little pods, that increase as they ripen to the size of a walnut, and being opened by the heat of the sun, discover a down of exceeding whiteness, which is the cotton. The down encompasses several little beans, which are the seeds of the plant, and are separated from the down by a sort of mill, which being worked by the motion of a wheel, the cotton falls on one side, and the seed on the other. There is also another kind of cotton-plant, called by botanists, *Gossypium Herbaceum*, which creeps along the ground as the vine would do if unsupported; and the cotton of this is the most esteemed. Cotton makes a considerable article in commerce, being spun and manufactured into stockings, waistcoats, quilts, tapestry, curtains and various other conveniencies. Muslins are made entirely of cotton, and it is frequently mixed with wool, silk, and flax in the composition of other stuffs. Abundance of cotton grows about Smyrna, from whence ten thousand bales are annually exported, and as much at least is spent in the manufactures of the country.

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The Turkish dominions in Europe afford a variety of useful fossils, and some mines of the richer metals. Near Siderocapfa, a town of Macedonia, lying on the north-east of Salonichi, mines of gold were discovered in the time of Philip, the father of Alexander the Great, from whence the town was anciently called Chrysitis. These mines are still wrought, and Martiniere tells us the Grand Signior receives from them ten thousand ducats every month.

Argentiere, formerly Cimolus, a little island in the Archipelago, takes its modern name from its mines of silver, which were once wrought; and M. Tournefort informs us, that the work-houses and furnaces where they used to prepare the metal, are still to be seen, but at present the inhabitants dare not open the mines, without leave of the Turks, who would make it a pretence for loading them with heavy taxes.

Siphanto, another island of the Archipelago, was antiently famous for its mines of gold and silver; but the places where they were, are now scarce known to the inhabitants. The island, however abounds with lead, according to M. Tournefort, who tells us, that about the middle of the last century, some Jews came thither, by order of the Porte, to examine into the mines; but the natives fearing they should be forced to work them, bribed the captain of the galliot, that brought over the Jews, to sink his vessel, which he accordingly did, by boring holes in

it while the Jews were aboard, who all went to the bottom, with a cargo of ore, whilst the captain saved himself in his long-boat. After this some other Jews were sent on the like errand, but met with no better success; for the Siphantines gave a sum of money to a French corsair, to cannonade and sink the galliot when she had got her lading; so that both Jews and Turks gave over their enterprize.

Divers parts of Greece, and several islands in the Archipelago, abound with excellent marble, though many of the quarries so famous in antiquity, are now lost or exhausted. Our countryman, Mr. Wheeler, mentions a Greek monastery, called Penteli, situated under a mountain of the same name, which he says is a perfect rock of white marble. Here he observed many curious grottos, lined with beautiful congelations, which are not uncommon in such places; and at a little distance, he saw the quarries, from whence vast quantities of marble had been dug for the finest structures in Athens; which made him no longer doubt but this was the mountain Pentelicus, so often mentioned by Pausanias, on account of its marble. Almost every one knows how famous the island of Paros has ever been for its beautiful marble, which is more frequently taken notice of in the writings of the ancients than any other kind, and was chiefly used for statues by the most celebrated sculptors of antiquity. The Parian marble is of a firm, compact, and close texture, considerably heavy, and of a very beautiful white,

white, but generally with some admixture of a feint bluish cast, and frequently veined with blue streaks of different breadth. It is extremely bright and glittering, and capable of the brightest polish of all the marble class; which, together with its not being very difficult to cut, has made it a favourite kind among our modern, as well as among the antient statuaries. Being principally used by those artists, we now know it under the name of Statuary-marble; and yet M. Tournefort affirms, that the best judges prefer the Italian to the Grecian marble, which gives false lights, and flies in little bits, if not cautiously managed, whereas that of Italy obeys the chissel, being of a much finer and closer grain.

To the island of Paros we are indebted for one of the noblest monuments of antiquity in the world, viz. the Arundel marbles, which are now preserved in the university of Oxford, as was mentioned towards the beginning of this work.

The island of Milo is remarkable for its hot springs, and the iron, alum, and sulphur with which it abounds. The sulphur of Milo was esteemed by the antients, being particularly commended by Pliny and Dioscorides. M. Tournefort says, it is very beautiful, having a greenish shining cast, and is found in lumps by digging up the ground, and in large veins in the quarries where they get their mill-stones. There are several mines of alum in the island,
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the entrance into which is narrow, and the vaults or chambers scarce high enough for a man to stand upright. Here the alum grows in a sort of flakes about an inch thick, and as these are taken away, new ones in a short time supply their places. But the greatest curiosity this island affords, is the plumose, or feathered alum, so called from its form, being an efflorescence of alum, composed of strait parallel threads or fibres, resembling the vanes of a feather. The pieces of this alum, in the caverns, where they have rest, and room enough to shoot, are found an inch and a half, or two inches in length, and as thick as one's finger; and are of the same kind, but larger, with the fibrous efflorescences found on the surface of Irish slate, and other alum-ores of our own country.

Emery, according to M. Tournefort, is found in great plenty in the island of Naxia, where, he says, they turn it up as they plough the ground, and sell a quintal of it for a crown, their quintal being a hundred and forty pounds. This mineral is extremely hard and very heavy, and the consumption is considerable amongst armourers, cutlers, smiths, glaziers, lapidaries, masons, and other artificers, being used in polishing and burnishing iron and steel works, and in cutting glass, marble, and precious stones. It is found in masses of no determinate shape or size, and is usually of a dusky brownish red on the surface, but when broken is of a bright iron-grey, though not without some tinge of redness, and is spangled all over with shining specks, which

which are small flakes of talc highly impregnated with iron. Sometimes it is very red and veined with gold; but this is rarely to be met with. The sort that is commonly used is found in the island of Guernsey, Tuscany, and many parts of Germany.

The island of Argentiére, formerly Cimolus, abounds with a heavy, crumbly, whitish kind of earth, or marle, the Terra Cimolia of the antients. It is also found in other islands of the Archipelago, and generally lies either on the surface, or a little below it, being moderately moist, but not at all tough or viscid. It is easily cut through with the spade, which leaves it rough and uneven, and often breaks it into rude irregular pieces. When dried, it becomes of a pure bright white, and of a closer texture. It is very soft to the touch, is easily broken between the fingers, adheres firmly to the tongue, and melts readily in the mouth, but leaves a considerable grittiness between the teeth. This marle, being fattish and soapy, is used by the inhabitants of the island in washing of linen; and Pliny mentions its being used by the antients in cleaning of cloaths. They likewise used it in medicine, but it has little share in the modern practice.

What we call Cimolia Alba, is the white tobacco-pipe clay, from which that of the antients is easily distinguished by its want of tenacity, and its alkaline quality; and to our Fuller's-earth we have given the name of Cimolia Purpurescens,

purefcens, whereas the ancient purple Cimolia was in all probability the Steatites, or Soap-rock, as we commonly call it, which is a hard white clay, with veins of purple, not only found in the islands of the Archipelago, but in some parts of Cornwall and Devonshire.

The Lemnian earth, so called from its being dug in the island of Lemnos, deserves to be mentioned on account of the great reputation it has had in all ages for its medicinal virtues. There are three sorts of this earth, viz. white, yellow, and red, of which the last is most esteemed. It is a heavy, close, compact earth, of a regular texture, and pale red colour; of a smooth and even surface, but not glossy; melts slowly in the mouth, and has an astringent taste, but leaves some grittiness between the teeth; does not stain the hands, nor break readily between the fingers.

There is another kind of earth, called Turkey earth, which is sometimes sold instead of the Lemnian, but it is not of so compact a texture, though it is considerably heavy. It breaks easily between the fingers, and is reddish on the surface, but more of an ash colour within. Great plenty of it is dug in the neighbourhood of Adrianople, and it is used by the Turks as a sudorific and astringent, and is famous among them in pestilential diseases.

SECT.

S E C T. III.

MOUNTAINS, RIVERS, CAVERNS,
VOLCANO'S, NEW ISLANDS, *and* RE-
MARKABLE TIDES.

AMONG the mountains of these countries, the most famous for height, is Mount Athos, situated in Macedonia, on a peninsula south of the gulph of Contessa. Pliny and Solinus assert, that the evening shadow of this mountain reaches to the market-place of Myrina, in the island of Lemnos, which is distant eighty-six thousand paces; and Pomponius Mela observes, that it reaches above the clouds. There are a great many monasteries on this mountain, inhabited by Greek monks, whence it is commonly called Monte Santo, or the Holy Mountain.

A chain of mountains, called Chimera, which divides Epirus from Albania, was also famous among the antients for its height, which is such, that the tops of some of them were said to have been frequently rent by thunder: these mountains were also called Acroceraunia Juga, and Ceraunici Montes. There is another chain of mountains, which separates Epirus from Thessaly, and is now called Mezzovo, which was the celebrated Pindus of the antients, and of which Mounts Parnassus and Helicon were

a part. Mount Parnassus, which was sacred to Apollo and the Muses, terminates at the top, in several high cliffs, or points; and below these cliffs is a fountain, with a very plentiful source of water, which, by the marble steps descending to it, and the niches made in the rock for the statues above it, is supposed to be the fountain Castalia, of which the Pythian prophetess, and the poets who pretended to inspiration, used to drink, and where they went to bathe themselves. Upon Mount Helicon, which was also sacred to Apollo and the Muses, are the famous fountains of Hippocrene, Pegasus, and Aganippe, together with the tomb of Orpheus.

Mount Olympus, now called Lecha, is a ridge of mountains, rather than one single hill, and stands to the north of Larissa, on the borders of Macedonia and Thessaly. Olympus is an exceeding high mountain, on which account it was thought to be the residence of the gods, and heaven was called by its name. Mount Ossa, now called Monte de Cassow, lies south of mount Olympus, as mount Pelion does to the east of it. These three mountains were famous in the mythology of the ancients; the poets having feigned that the giant, intending to take heaven by escalade, raised mount Ossa upon mount Pelion, and mount Olympus upon the top of both. Between Olympus and Ossa, along the banks of the river Peneus, or Salmabria, lie the fruitful and beautiful vallies of Tempe, so famous in antiquity.

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There are several mountains and rivers in Peloponnesus, or Morea, which were celebrated by the antient poets: among these, the mountain Cyllene, in Arcadia, is the highest, on the top of which stood a temple, dedicated to Mercury, of whom Maia was delivered on this mountain. Mount Mænalus, situated also in Arcadia, had its name from Mænalus, the son of Lycaon, and was consecrated to the god Pan. Mount Nonacris, in Arcadia, is said by Pausanias to be the highest mountain he ever saw; and Vitruvius asserts, that a stream issues from it, called Styx, the water of which is reckoned deadly, on account of its excessive coldness, which occasioned the fable of the poets, that it was one of the rivers of hell.

The waters of the river Alpheus, in the Morea, were famous among the antient Greeks, for taking away spots and blemishes in the skin; and the poets ascribe a miraculous course to this river, by supposing that it runs through the Ionian sea, till it mixes with the waters of the fountain of Arethusa, in Sicily; because it is in several places swallowed up in the earth, whence it issues again with a larger stream. The river Eurotas, which rises near the spring of the Alpheus, loses itself also under ground, but rises again near Mistra.

Near the city of Candia, in the island of the same name, is mount Ida, so often celebrated in the writings of the antients; though it exhibits no other prospect than that of a wild, barren,

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huge mountain, full of lakes and quagmires, and generally covered with snow.

In the island of Antiparos, in the Archipelago there is a cave or grotto, which M. Tournefort, who viewed it in the year 1700, represents as one of the greatest wonders in nature. The descent into this grotto is very difficult and dangerous, being for the most part down rocks, and frightful precipices, by means of ropes and ladders, and the assistance of guides, who attend with torches. From the first entrance into the cavern, to the bottom of the grotto, is reckoned a hundred and fifty fathoms, and the grotto itself is about forty fathoms high, and fifty broad. The roof, which is in form of an arch, is embellished with variety of natural fret-work, from whence hang resemblances of bunches of grapes, festoons, and lances of a surprising length. All round the grotto are formed several little closets or cabinets, among which there is one particularly distinguishable, the productions that form it, says M. Tournefort, so exactly resembling the roots, stems, and heads of cauliflowers, that one would think nature intended thereby to shew us how she operates in the vegetation of stones. These figures are all of white marble, transparent in small pieces, and, when struck, sound like copper.

Here are likewise three or four columns of the same stone, planted like trunks of trees on the top of a little rock, one of which is six feet eight inches high, and one foot in diameter; and on

the same rock are several other budding pillars, resembling the stumps of horns. These stems of marble, adds our author, must certainly vegetate, for not a drop of water falls into the place; and if it did, we cannot conceive how a few drops, falling from such a height, as the top of this grotto, should form cylindrical pieces, and always of the same regularity.

At the farther end of the grotto, appears a pyramid still more surprising, which has been called the Altar, ever since the year 1673, when the marquis de Nointel, the French ambassador to the Grand Seignior, caused masqs to be celebrated in this cavern. It stands by itself, is about eight yards high, and consists of many large bunches, resembling cauliflowers, and all of a dazzling whiteness, like the rest of the grotto. This pyramid, M. Tournefort thinks, is the finest marble-plant in the world; for he supposes it impossible that it should be formed by the droppings of water, to which the congelations in grottos are usually attributed; and therefore it is more probable that these productions, as well as those which hang down from the roof like icicles, are owing to a principle of vegetation.

In order to go round this pyramid, one must pass under a great mass of congelations, the back part of which is hollow like the roof of an oven. The entrance into it is low; but the sides, which are whiter than alabaster, are so figured, as to appear like tapestry of great beauty. From

the top of the roof, just over the pyramid, hang festoons of an extraordinary length, which form, as it were, the attic of the altar. At the foot of the altar are two half-columns, the tops whereof M. de Nointel caused to be broken off, that they might serve as a table in the celebration of the mass; the memory of which transaction is perpetuated by an inscription, carved by his order, on the basis of the pyramid.

In the island of Candia, there is a subterranean maze, or labyrinth, which pervades the whole inside of a hill at the foot of mount Ida, three miles from the ruins of Gortyna. The entrance of this labyrinth is seven or eight paces broad, but so low, that a man cannot pass it without stooping. The bottom of it is very rough and uneven, but the roof is flat, being formed of beds of stone, lying horizontally one upon another. Proceeding forwards through a sloping cavern, we soon meet with innumerable turnings and windings, so irregular and intricate, that if a person happens to strike into any of them, out of the main path or alley, he is in great danger of being bewildered and lost. To prevent this, strangers seldom deviate to the right or left, but keep along the principal alley; and to find the same way back again the more easily, they scatter straw on the ground, stick up bits of paper at every turning, or take some other precaution of that nature. The chief passage is about seven feet high, and the greatest part of it is wide enough for three or four persons to walk a-breast; but in some places a man must stoop

sloop a little, and in one part he is obliged to creep upon his hands and knees to get along. It is near a mile from the entrance to the end of the labyrinth, where the grand walk divides itself into two or three branches, and terminates in circular rooms, cut out of the rock, in which strangers rest themselves.

Belonius, and some other authors, have imagined, that this wonderful labyrinth was originally a quarry, out of which stones were dug for the building of Gnosſus and Gortyna: but M. Tournefort, who thoroughly considered the matter, gives several strong reasons against such an hypothesis. He thinks it much more probable, that it was at first a natural cavity, which some persons had the curiosity to enlarge, by widening the passages, and taking down some strata of stone to heighten the roof; for the Cre-tans, he observes, were a polite people, devoted to arts as well as arms, and took delight in perfecting the rude sketches of nature. There are several other natural openings in the neighbouring mountains, and abundance of caverns in the rocks throughout the island, which seem to confirm this conjecture.

Not far from the island of Santorin, or Sante-rini, in the Archipelago, a new island rose up from the bottom of the sea, towards the beginning of the present century. This, however, is not the first prodigy of that kind which has appeared near Santerini; for the Great and Little Burnt island, as they are called, were both

raised out of the sea in the same manner; the first, about two hundred years before the birth of our Saviour, the latter in the year 1573; and Aspronesi, or the White island, which is a little without the bay of Santerini, emerged in the time of Vespasian. All this is occasioned by violent earthquakes, and subterraneous fires, whose dreadful effects are sufficiently known in several parts of the world; of which they had an instance near Santerini, in the year 1650, when the shocks of an earthquake were accompanied with a roaring noise under-ground, sulphureous exhalations, an intolerable stench, and a black smoke, which rose out of the sea mixed with flames to a considerable height. The sea was then tossed backwards and forwards in such a manner, that it overflowed and destroyed thirty thousand perches of land in Santerini; and the air was so infected with exhalations from the fire, that twenty-five persons, and a great many beasts, were stifled. At length, when the force of the fire and earthquake had raised up a mass of earth and stones, within eight or ten fathoms of the surface of the sea, a vent being opened on a sudden, the water rushed in like a torrent, and extinguished the fire, and thereby prevented the appearance of another island. History affords us several other instances of the surprizing effects of these concussions of the earth, near Santerini, and particularly M. Thevenot relates, that about the year 1638, a prodigious quantity of pumice-stones was cast up from the bottom of the sea, with such noise and roaring, as resembled the discharge of artillery; insomuch,

that the inhabitants of Scio, which is above a hundred miles distant, imagined the Venetian and Turkish fleets were engaged. The air was likewise so filled with noxious exhalations, that many people died in Santerini, and the silver in men's pockets or chests, was tarnished, even at the distance of Scio and Smyrna.

In the bay of Santerini, on the 23d of May, 1707, after an earthquake that happened the night before, a new island was discovered early in the morning by some seamen, who not being able to distinguish what it was, and taking it for some wreck brought thither in the night-time, rowed immediately towards it; but finding a heap of rocks and earth, instead of a floating wreck, they hastened back again, and spread the report over Santerini. How great soever the apprehensions of the inhabitants were at the first sight of this phenomenon, their surprize abated in a few days; and seeing no appearance of fire and smoke, some of them ventured to go ashore upon the new island. Their curiosity led them from one rock to another, where they found a sort of white stone that cut like bread, and very much resembled it in form, colour, and consistence. They also found great numbers of oysters sticking to the rocks; but whilst they were employed in gathering them, they perceived the island move and shake under their feet, upon which they retired to their boats with the utmost precipitation. With these motions and tremblings, the island every day increased, not only in height, but also in length and breadth; tho'
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now and then it happened, that whilst it was raised and extended on one side, it sunk and diminished on the other. F. Goree observed a rock rise out of the sea, about forty or fifty paces from the island, which continued four days together, when it sunk again, and appeared no more; but several others have appeared and disappeared alternately, which at last remained fixed and unmoved. During this time, the colour of the surrounding sea was changed, being at first of a light green, then reddish, and afterwards of a pale yellow, accompanied with a noisome stench, which spread itself over great part of Santerini.

The smoke appeared first on the 16th of July, not indeed from the island itself, but from a ridge of black stones, which suddenly rose up about sixty paces from it, where the depth of the sea was before unfathomable. Thus for some time there were two separate islands, whereof one was called the White, and the other the Black island, by reason of their different colour; but they were not long before they united, and that in such a manner, that these black rocks became the centre of the whole island. The smoke issuing from them was very thick, and of a whitish colour, like that of a lime-kiln; which being driven by the wind towards Santerini, it penetrated the houses of the inhabitants, but without doing much harm, the smell not being then very offensive.

In the night between the 19th and 20th of July, flames were observed to issue with the smoke,

smoke, to the great terror of the inhabitants of Santerini, especially those of the castle of Scaro, who were not above half a league distant from the burning island. This island now increased very fast, large rocks daily springing up, which added sometimes to its length, sometimes to its breadth, insomuch that the additions from time to time might easily be perceived. The smoke also increased very much; and there being no wind stirring, it ascended so high, as to be seen at Candia, Naxos, and other distant islands. During the night, it appeared like a column of fire, fifteen or twenty feet high; and the sea at that time was covered with a scurf or froth, in some places reddish, and in others yellowish, from whence proceeded such a stench over the whole island of Santerini, that they were obliged to burn perfumes in their houses, and to make fires in the streets, to prevent infection. This indeed did not last above a day or two, the froth being dispersed by a strong gale of wind; but another evil quickly followed, for the wind drove the smoke upon most of the vineyards of Sante-rini, whereby the grapes in one night were parched up and destroyed. It was also observed, that the smoke sullied plate and copper, and caused violent head-achs, attended with reachings.

The 31st of July the sea was perceived to smoke and bubble near the island in two different places, where the water formed a perfect circle, and looked like oil when set upon the fire. This lasted for above a month, during which time a
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a great many fish were found dead on the shore. The following night was heard a dull hollow noise, like the distant report of several cannons ; which was immediately followed by flames of fire shooting up from the furnace, to a great height in the air, where they suddenly disappeared. The next day the same hollow sound was heard several times, and succeeded by a blackish smoke, which notwithstanding a pretty fresh gale, rose up in the form of a column, to a prodigious height ; and this in the night, would probably have appeared as if it were all on fire.

On the 7th of August, the noise was different, resembling that of large stones, thrown all together into a deep well, and the extremities of the island seemed to be in great commotion. This noise, after it had lasted some days, was succeeded by another much louder, which so nearly resembled thunder, as hardly to be distinguished from three or four real claps, that happened about the same time. On the 21st, the fire and smoke were considerably diminished, but the next morning they broke out with greater fury than before. The smoke was very red and thick, and the heat was so intense, that all round the island the sea smoaked and bubbled up in a surprising manner. At night, F. Goree, viewing with a telescope, the large furnace upon the highest part of the island, discovered sixty smaller openings, or funnels, all which emitted a very bright flame ; and he imagined there might be as many more on the other side of the great volcano.

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The 23d of August, in the morning, our author observed the island was much higher than the day before, and that its breadth was increased by a chain of rocks, sprung up in the night time, almost fifty feet above water. The sea was also covered again with the reddish froth before mentioned, which always appeared when the island received any considerable additions, and occasioned an intolerable stench, till it was dispersed by the wind, and the motion of the waves.

The 5th of September the fire opened itself another vent at the extremity of the Black island, from whence it issued for several days, during which time there came but little out of the large furnace : and from this new passage it was surprising to see the fire dart up three several times to a vast height, resembling so many sky-rockets of a glowing lively red. The following night the subterraneous thunder made a terrible noise, and immediately afterwards a thousand sheaves of fire, as it were, flew up into the air, where breaking and dispersing, they fell like a shower of stars upon the island, which appeared all in a blaze, presenting to the astonished spectator at once a most dreadful and beautiful illumination. To these natural fireworks succeeded a kind of meteor, which hung for some time over the castle of Scaro, like a fiery sword, and increased the consternation of the inhabitants.

On the 9th of September the White and Black Islands united, after which the western end of the island daily increased. There were now only four openings that emitted flames, which came out with great impetuosity, sometimes attended with a noise like a large organ-pipe, and sometimes like the howling of wild beasts. On the 12th the subterraneous noise was very much augmented, having never been so dreadful nor so frequent as that day and the following. The bursts of it, like a general discharge of the artillery of an army, were repeated ten or twelve times in four and twenty hours, and immediately after each clap the large furnace threw up huge red-hot stones, which fell into the sea at a great distance. These claps were always followed by a thick smoke, which spread clouds of ashes over the sea and the neighbouring islands.

The 18th of September an earthquake was felt at Santerini, which did no great damage, but considerably enlarged the burning island, and gave vent to the fire and smoke in several new places. The claps were also more terrible than ever, and so violent that one would have thought every house in Scaro must have been shaken to the ground: and in the midst of a thick smoke, which appeared like a mountain, one might see and hear large pieces of rock thrown up with as much noise and force as balls from the mouth of a cannon, and afterwards fall down upon the island, or into the sea. One of the small neighbouring islands was several times covered

ed with these fiery stones, which being thinly crufted over with sulphur, gave a very bright light, and continued burning til that was confumed.

On the 21st of the same month, after a dreadful clap of subterraneous thunder, very great lightnings ensued; and at the same instant the new island was so violently shaken, that part of the large furnace came tumbling down, and huge burning rocks were thrown to the distance of two miles or upwards. This seemed to be the last effort of the volcano, and to have exhausted the combustible matter, especially as all was quiet for several days after; but on the 25th the fire broke out again with still greater fury; and amongst the claps there was one so terrible, that the churches of Santerini were presently filled with crowds of people, expecting every moment would be their last, and the castle of Scaro suffered such a shock, that the doors and windows of the houses flew open. Thus the volcano continued to rage during the remaining part of the year, and the month of January 1708; the large furnace, without one day's intermission, throwing out the stones and flames, at least once or twice, but often five or six times a day.

The 10th of February, in the morning, a pretty strong earthquake was felt at Santerini, which the inhabitants looked upon as a prelude to greater commotions in the burning island. Nor were they deceived in their expectation;

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for soon after the fire and smoke issued in prodigious quantities, the claps like thunder were redoubled, and nothing appeared but horror and confusion. Rocks of amazing bulk were raised up to a great height above the water, and the sea raged and boiled to such a degree, that it occasioned a general consternation. The subterraneous bellowings were heard without intermission, and sometimes in less than a quarter of an hour there were six or seven eruptions from the large furnace. The noise of the repeated claps, the quantity of huge stones that flew about on every side, the houses tottering to their very foundations, and the fire which now appeared in open day, surpassed all that had hitherto happened, and formed a scene astonishing beyond description.

The 15th of April was remarkable for the number and violence of the bellowings and eruptions, by one of which near a hundred large stones were thrown up all together into the air, and fell again into the sea at about two miles distance. From this time to the 23d of May, the anniversary of the birth of the new island, things continued much in the same state, but afterwards the fire and smoke subsided by degrees, and the subterraneous thunders grew less terrible.

On the 15th of July our author, accompanied by the Latin bishop of Santerini, and some other ecclesiastics, hired a boat to take a near view of the island, and to land upon it, if they
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found it practicable. They made directly towards it on that side where the sea did not bubble, but where it smoked very much. Being got into this vapour, they perceived a close suffocating heat, and found the water very hot; whereupon they directed their course towards that part of the island which was farthest distant from the large furnace. The fires, which still continued to burn, and the boiling of the sea, obliged them to take a great compass, and yet they felt the air about them very hot and sultry. Having coasted round the island, and surveyed it carefully from an adjacent one, they judged it to be two hundred feet above the sea, about a mile broad, and five miles in circumference: but not being thoroughly satisfied with this view of it, they resolved to attempt once more to land, and accordingly rowed towards that part of the island where no fire or smoke had been perceived: but when they had got within a hundred yards of the place, the great furnace discharged itself with its usual fury, and the wind blew upon them a thick smoke and a shower of ashes, which obliged them to quit their design. Having retired a little, they let down a plummet, and had ninety-five fathom water without finding the bottom, the line not being long enough. On their return to Santerini, they observed that the heat of the water had melted most of the pitch from their boat, which was therefore grown very leaky.

From this time till the 15th of August, when F. Goree left Santerini, the fire, smoke, and noise continued pretty moderate; and by the accounts he received from thence for several years afterwards, it appears that the island still increased, but that the fire and subterraneous noise were very much abated: and our author supposes, as there is no likelihood that the fire will make itself a passage at the bottom of the sea, so as to let in the water to extinguish it, that the volcano will not have an end till the mine of sulphur that feeds it be entirely consumed.

To this surprising phænomenon, on which we have dwelt so long, we cannot forbear adding a brief account of another in the Archipelago, which has been taken notice of in all ages as one of the greatest wonders in nature, viz. the irregular flux and reflux of the Euripus, a famous streight, dividing the island of Negropont, antiently Eubœa, from the continent of Greece. This channel is so narrow, that the chief town of the island, called Egripos by the modern Greeks, has a communication with the main land by a stone bridge of four or five arches, and a draw-bridge just wide enough for a galley to pass through; in this part therefore the inconstancy of its tides is the most easily discerned. These tides are sometimes regular and sometimes irregular, which F. Babin, who observed them very particularly, attributes partly to the situation of certain gulphs on each side of the streight, though he allows

allows the moon to be the principal cause. From the three last days of the old moon to the eighth of the new the tides are regular; the ninth they become irregular, and continue so till the thirteenth inclusively; the fourteenth they are irregular again, and remain so till the twenty-first, from whence they are irregular to the twenty-seventh. When the tides of the Euripus are regular, they flow twice in four or five and twenty hours, as in the ocean, and ebb as often, losing near an hour every day, and are about as long coming in as going out: but during the time of their irregularity they commonly flow and ebb nine or ten times in twenty-four hours, unless the wind blows hard, and even then six or seven; nay, our author himself, in the space of an hour and a half, saw the water change its course three times, though the wind was pretty strong against it. The tides of this channel usually rise a foot, or a little more, seldom reaching to two feet; and between the flux and reflux the water seems to stand still for a short time, insomuch that feathers or straws cannot be perceived to move on its surface. From these observations of Father Babin, it is easy to reconcile the authors who have written so differently on the Euripus; for those who mention no more than two fluxes and refluxes in twenty-four hours, as in the ocean, have only observed its motion during the days of its regularity: nor have the ancients delivered a falsehood, in saying there are seven reciprocations in one day, for that happens even when the winds trouble and re-

tard the flood ; and the Father assures us, that in still weather the tides sometimes ebb and flow twelve or fourteen times in the space of four or five and twenty hours, as he himself had observed, and was told by the millers, who see their wheels change according to the course of the water.

We shall conclude this article with observing, that though the Mediterranean has no sensible tides, except some small ones in the gulph of Venice, that of the Euripus abovementioned, &c. yet a strong current continually sets into it from the ocean through the Streights of Gibraltar, and likewise through the Hellespont from the Uxine and the Propontis ; whence one would imagine, that instead of not swelling like the ocean, it should rather overflow its bounds, and drown the adjacent countries. What becomes of the vast quantity of water thus poured into the Mediterranean, is a speculation that has long employed the philosophers. Dr. Smith accounts for it by supposing an under-current to carry off as much water as the upper one brings in ; and such currents it is probable there are in several parts of the sea : but Dr. Halley, without having recourse to this hypothesis, solves the phænomenon from the great evaporation. The result of an experiment made by this excellent author to find the quantity of vapour raised from the sea by the action of the sun, was this, that the thickness of water evaporated from the surface of the sea in summer is one fifty-third part of an inch in the space of

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two hours ; which, for the ease of calculation, being supposed only a sixtieth part, the quantity exhaled in twelve hours will be one-tenth of an inch. On this principle every mile square will be found to evaporate, in twelve hours, 6914 tuns of water ; and every square degree, supposed of 69 English miles, will evaporate thirty-three millions of tuns. Now the area of the Mediterranean being estimated at 160 square degrees, it will lose in vapour in a summer's day 5280 millions of tuns ; and yet this quantity of vapour, great as it is, is only the remains of what is raised another way, viz. by the winds, which sometimes sweep off the water faster than it is exhaled by the heat of the sun.

As to the quantity of water the Mediterranean receives, the Doctor supposes the Ebro, Rhone, Tiber, Po, Danube, Niester, Boristhenes, Tanais, and Nile, to furnish each of them as much water as the Thames ; not that all of them are in reality so great, but so to allow for the lesser rivers that fall into it ; and as the Thames is computed to evacuate daily 20,300,000 tuns of water, the nine rivers above mentioned, will only evacuate 1827 millions of tuns in a day, which is little more than a third of what is raised in that time in vapour.

S E C T. IV.

An Historical Account of the most remarkable Earthquakes, Fires, Epidemic Diseases, and other public Calamities, which, at different Times, have visited the Inhabitants of Turkey in Europe.

BESIDES the extraordinary earthquake described in the preceding *Section*, the annals of these countries make mention of many dreadful earthquakes, in various parts of European Turkey, which were attended with the most fatal and desolating effects, too horrid to be related.

In the year 1033, being the fourth year of the emperor Romanus's reign, an earthquake was felt for forty days together at Constantinople, which destroyed that city, as well as several others. At the same time a comet appeared, which passed with a terrible noise from north to south; the whole horizon seemed to be in a flame.

In the year 1667, Ragusa suffered such a terrible earthquake, that it was almost intirely swallowed up, and what remained was very near being totally destroyed by fire.

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The Morea is subject to frequent and violent earthquakes, one of which, 469 years before Christ, overturned a ridge of mount Taygetus, destroyed the whole city of Lacedemon, or all, except five houses, according to some historians, and buried two thousand of the inhabitants in its ruins.

The houses of Constantinople and of most other cities of Turkey being built of wood and mud, a fire makes a prodigious havock among them; and fires are very frequent in Turkey, occasioned by the Turkish practice of smoaking in bed: in Constantinople, which is frequently set on fire by incendiaries for the sake of having an opportunity to pilfer, it is thought but an inconsiderable fire, which destroys no more than two or three hundred houses.

Constantinople is frequently visited by the plague, as are many other cities of Turkey; and the inhabitants of Abdera in Romania are so subject to frenzy and lunacy, that *Abderica Mens* has passed into a proverb, to denote a lunatic.

S E C T. V.

*An Account of the most celebrated Inventions,
Discoveries, &c. of the Inhabitants of Turkey
in Europe.*

EUROPEAN Turkey was antiently inhabited by nations, who, of all others, made the greatest figure in history, for their learning, wisdom and valour. This was the country of philosophers as well as of heroes; and the antient Greeks surpassed all the nations of the earth in their inventions and improvements in the arts and sciences: from them the rest of the world seem to have derived all their systems of knowledge; and they were no less celebrated for arts than for arms. It therefore can hardly be expected, in a *Compendium* of this kind, that mention should be made of all the great names that antiently adorned Greece, which would require several volumes, and upon which subject many thousand have been written. Let it therefore be sufficient to mention the most celebrated systems of the Greek philosophers, and such as have been transmitted down to our times, and the most famous physicians, architects, sculptors and painters, without taking any notice of the many illustrious historians, orators, and poets of Greece.

Thales, who was a native of Phoenicia, is said to have brought the knowledge of geometry

try into Greece, and was the first who demonstrated, that the angle at the circumference of a circle, subtended by the diameter, is always a right angle. This discovery led him to find out other properties of the circle, and afterwards to trigonometry, or the art of measuring heights and distances by means of triangles. Pythagoras, who, according to Jamblichus, had learned a great deal from the pillars of Mercurius, taught geometry to his disciples. He used it in explaining sensible and material things; as he did of numbers and arithmetic, to make his scholars conceive things which are not objects of the senses. He discovered that famous theorem relating to the square of the hypotenuse being equal to the squares formed by the base and cathetus. Euclid, who lived in the time of the first Ptolemy, and whom we must not confound with another philosopher of that name, the disciple of Socrates, rendered himself famous by his elements of geometry. Aristæus, who is called the antient, to distinguish him from a later philosopher of the same name, wrote five books upon the conic sections, which are entirely lost. It is not exactly known at what time this geometrician lived; some make him cotemporary with Euclid. Apollonius collected all that Aristæus, Eudoxus of Cnidus, Menecmus, Conon, Thrasideus, and some others, had written before him. He first gave the three conic sections the names of parabola, hyperbola, and ellipsis. All these authors prodigiously improved the geometry of the first age of literature, and, by its assistance,

carried

carried their enquiries and knowledge in the sciences to a much greater extent.

Astronomy was cultivated with great care by the Greeks. Chiron, the father of the Grecian Astronomy, lived 1500 years before the Christian æra. Thales added a great many useful discoveries in astronomy, particularly the observation of the equinoxes, and solstices, and the motion of urfa minor about the north pole. Anaximander, his disciple, knew the dimensions of the sun and moon, and taught the Greeks the obliquity of the ecliptic. Indeed he differed and separated from his master, as to the diurnal motion of the earth. In this he paid too great a deference to his senses, and established the opinion of the earth's immobility, and of the diurnal revolution of the sun about it. Eudoxus, cotemporary of Melon and Hipparchus, adopted the system of Anaximander. These astronomers placed the earth in the centre of the universe, and inclosed it in three different regions of the air; the lower, bound by the reflection of the sun's rays; the middle, where the clouds are; and the higher, above which they placed the region of elementary fire, a luminous body sovereignly hot. With regard to the disposition of the orbits of the planets, they first placed that of the moon, and above the moon they placed the orbs of Mercury, Venus, Mars, Jupiter, and Saturn. All these orbits they supposed spherical, and perfectly diaphanous, and inclosed within one another. The use they made of these heavens,

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was to account for the motions of the planets from west to east. Eudoxus and Hipparchus placed the fixed stars, which were higher than all the planets, in the firmament, as in a vault concentric to the earth. This they supposed the first mover, which carried about with it all the inferior heavens, to make them move in twenty-four hours from east to west. Hipparchus, also, greatly improved astronomy by making a catalogue of the fixed stars, the first attempt of that kind; and which, according to Pliny, was an undertaking fit for a god to perform.

Philosophy was diligently cultivated by the Greeks. Thales, while he resided at Miletus, taught the Greeks the first elements of philosophy; and which he is said to have perfected by the observations he made in Egypt. From the great discoveries he made in geometry, astronomy, and the doctrine of the universe, he acquired the magnificent title of Wise. His principle was, that water is the chief material of which natural bodies are composed, and into which they are resolved. He imagined the earth a great mass, floating on a vast abyss or ocean of water; and from hence he deduced the cause of earthquakes, and the irruption of springs. He conceived God to be the author of all natural motion, and the soul that animated the universe. The magnet and jet he imagined to have souls, because of their attracting virtue. To him is ascribed the invention of measuring the height of the pyra-

minds by their shadows ; and it was he who first discovered the natural reason of eclipses, which before were looked upon as ominous, and presages of some calamity. He foretold that which terminated the five years war between the Lydians and the Medes, when those poor people, frightened at the strange darkness, and believing the sun hid himself to avoid seeing the slaughter, laid down their arms and composed their quarrels. Besides Thales, Solon, Chilon, Pittacus, Bias, Cleobulus, and Periander, had the same title bestowed upon them. And as Thales was the first, who, by his travels into the eastern countries, became acquainted with philosophy, and introduced it into Greece, these were the authors of several excellent laws and schemes of government : and as the title of Wise was conferred on the first for his excellent skill in geometry, and the knowledge of nature, so it was conferred on the others for their excellent precepts in morality and politics.

The disagreement among the philosophers of this age produced several sects ; these had a double original ; the one from Anaximander, the disciple of Thales, and, therefore, called Ionic ; and the other from Pythagoras, that prince of philosophers, which, from the place where he held his school, was called the Italic. Anaximander varied from the doctrine of his master, and, instead of water, made infinity the principle of all things, but has left us without any explication of his meaning. Besides
him,

him, there were Anaxagoras, Heraclitus, Democritus, and Anaximenes; the first acknowledged an eternal Being; the second, fire; the third, atoms; and, the last, air, for the first mover.

Socrates, an Athenian, was the author of the second sect: his principal study was virtue, morality, and the regularity of our lives and actions. He did not confine his lectures to a particular place; but, wherever he was, his conversation was always pleasant and instructive. The camp, the forum, the public streets, the houses of his friends, the prison, where he endured great hardships, were so many schools of knowledge and virtue. For his great wisdom, his manly and noble thoughts, the ease and sweetness of his expression, he was admired by all men, and esteemed the prince of philosophers. He had a true notion of the divine nature, and vigorously opposed polytheism; for which his enemies reproached him as an infidel, and an enemy to the gods, and condemned him to death. He drank the poison with such majesty of soul, such serenity of mind, as shewed the absolute empire of his reason over his passions, and the impotence of the malice of his enemies, who could not disturb the tranquillity of his mind, or make him die any other than Socrates.

The succession of the Ionic philosophy, which, before Socrates, was single, was soon after divided into several schools and sects, some of

which were of less note, and lasted but a short time ; others were more considerable, and of longer continuance : of the former kind were the Cyrenaic, Megaric, Eleac, and Erètriac sects ; of the latter were the Academic and the Cynic, which two gave birth to the Peripatetic and Stoic.

Aristippus, a disciple of Socrates, was the chief of the Cyrenaic sect. He placed the sovereign good in pleasure, and thought virtue only commendable, as it conduced to acquire it. The distinction of right and wrong, just and unjust, he looked upon as arbitrary, not established by nature, but law and custom. As his principles were vicious, so his life was conformable to his doctrine, passing it in mirth and jllity. His good humour rendered him agreeable to Dionysius, the tyrant of Sicily, while the severity of Plato, which he unjustly called moroseness, offended that haughty prince. Aristippus acknowledged but two passions, pleasure and grief, as the spring of all human actions ; and these are diversified according to the temper and complexion of every person. He derided the calmness and serenity of the mind, or exemption from all passion, in which others placed human happiness, regarding this as a mere inactivity, and a tiresome indolence. He likewise derided the plain and simple way of living observed by his old friend Antisthenes, and admired the plenty, ease, and luxury of the Sicilian court.

The Megaric sect was instituted by Euclid, who, according to most authors, was a native of Megara; though others say he was born at Geta, a city of Sicily. He affected litigious disputes, and was, therefore, told by Socrates, that he knew how to contend with sophists, but not with men. Accordingly he instituted, suitable to his contentious humour, a sect, which at first was called Megaric, from the place of his birth, and afterwards Eristic, from its litigious and sophistical nature. Afterwards it was called Dialectic; which name Dionysius, a Carthaginian, first gave this sect, because their discourse consisted of question and answer.

Euclid affirmed that there was but one good, which is called by several names; sometimes prudence, sometimes God, sometimes the mind, and the like; and asserted there was nothing opposite to good.

His arguments were not founded on assumption, but inference: and would not admit of disputation by similitude, asserting that it consisted of similar or dissimilar; if of similar, it was the most proper method to examine the things themselves to which they are similar: if of dissimilar, the comparison is of no use.

The Eleac sect was instituted by Phædo, an Elean, of a noble family. In his youth he had the misfortune to be taken by pirates, who sold him as a slave. Socrates often observed him, and, being pleased with his aspect, persuaded

Cebes, according to Aulus Gellius, though Laertius says it was either Alcibiades or Plato, to buy him ; from which time he addicted himself diligently to philosophy, was a constant disciple of Socrates, and so much affected by Plato, that he called that most excellent discourse of the immortality of the soul, after him, Phædo.

But the most eminent of all the sects derived from Socrates was the Academic, who took their denomination from the place where their school was erected. Plato was the chief of this sect. He had a plentiful fortune ; and after being for some time a scholar of Socrates, he travelled into different parts to hear the greatest masters of his time. In Italy he studied the doctrine of Pythagoras, and seems to have taken many things from the writings of Moses, and other Hebrew prophets, which he probably met with during his travels in Asia. Some look upon him as the inventor of dialogue, but others say he only refined and polished it. The analytic method of reasoning, that noble invention, is generally ascribed to him. Instances of this method are to be found in the writings of Euclid, Apollonius, Pappus, and other ancient geometrical writers. Plato held mathematical learning of the greatest use in all parts of human knowledge, requiring that all his scholars should be previously instructed in the elements of geometry.

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The philosophy of Plato was held in great veneration during the first ages of Christianity, which, perhaps, proceeded from his teaching that God had one only begotten son, whose power extended over all creatures. In short, the notions of this great philosopher agree, in many points, with the tenets of the Christian religion.

Plato held the soul was immaterial and immortal; that it was free and independent, but subject to necessity or fate. He diligently cultivated the science of morality, which he has diffused through all his works.

After the death of Plato, his disciples divided into two sects; the first remained in the old academy, the other took possession of the Lycæum. The rest were called Peripatetics, of whom Aristotle, a native of Stagyra, was the chief. He was the first of the antient philosophers who gave us a complete methodical system of morality, at least, of those whose writings we have left. He made great improvements in logic, as well as other parts of philosophy; invented categories, formed the syllogism, and determined several modes and figures; detected the arts of sophistry, wrote a great number of books on metaphysics, physics, natural history, &c. The fate of the writings of this philosopher is strange: and it is surprising to find men judge so differently of the same thing in the same age: men have been
excom-

excommunicated and treated as heretics for reading them to their disciples : at other times they have been introduced into the schools and universities, and no other philosophy suffered to be taught. They have, in one age, been looked upon as the standard of truth : he has been stiled the genius of nature, and his performances the highest pitch of human wit. At other times, this philosophy has been treated as trifling, verbose, empty, and litigious. Such has been the fate of this philosophy : and the discoveries of the moderns have demonstrated, that his opinions, with regard to the phænomena of nature, were erroneous.

Another branch of the school of Socrates were the Cynics. Antisthenes was the founder of this sect, and had, among others, the famous Diogenes for his scholar. What Mr. Bayle has said of Diogenes, may be generally applied to the philosophers of this sect, " That they were of the number of those extraordinary persons, who run every thing into extremes, without excepting even reason itself ; and who verify the maxim, that there is no great genius without a mixture of folly. They had learned from Socrates, that mortality was the most useful of all the sciences, and what deserved our greatest care and application. From this true principle, they absurdly concluded, that logic, natural philosophy, geometry, music, the liberal arts and sciences ; in a word, every thing that did not immediately relate to the science of morality, was to be despised and neglected. The
funda-

fundamental maxim of their doctrine was, to live in conformity to the rules of virtue, which is sufficient to make men happy. But the consequences they drew from thence, were, in some things, too rigid, and in others too remiss. The gods, said they, have need of nothing; this is their proper and natural condition: those, therefore, who need only a few things, the most resemble them. In order to procure this happy independence, and to shew with what an utter indifference they looked upon riches, pleasures, honours, and the approbation of men, they pretended we ought entirely to renounce all the conveniences of life, and voluntarily reduce ourselves to the most extreme poverty; and they accordingly pursued this maxim in their manner of living: a long beard, a cloak, a staff, and a wallet, made up the whole of their attire, equipage, goods, and chattels. Diogenes, for his part, would have no other habitation than a tub; his wooden cup too, when he found he could drink out of the hollow of his hand, was thrown away. Antisthenes said, "He had rather lose his senses, than be sensible of the least pleasure." They thought themselves intitled freely to make use of whatever came in their way, without troubling themselves whether they had the owner's consent or not; which practice they justified in this manner: "All things, said they, belong to the gods; but the sages are friends to the gods, and all things are common among friends; therefore all things belong to the sages." They laughed at all human establishments, believing themselves bound

bound by no other law than the law of nature, of which they had very false and imperfect notions.

The sect of the Stoics had its origin from that of the Cynics. The author of it was Zeno, who, having first been a scholar of Crates, and afterwards a hearer of other philosophers, at last instituted this new sect. This philosophy has formed great men, and charmed a great number of people, by its proud and ostentatious principles. It aims at nothing less than fortifying men against bodily torments, and arming them against the blows of fortune. Zeno imagined the world to be an animal; whereof the supreme God was the soul, or the active principle; and matter the passive principle. That eternal intelligent Being which produced all things, and directs them by his providence, was, in the opinion of the Stoics, nothing but a fiery substance; or, as it were, an operative mechanic fire; whereof some parts animated plants, beasts, and men; whilst others, more subtle and elastic, made the gods in the sun and in all the stars. They believed the gods themselves, the supreme God only excepted, would one day be destroyed by fire, with the rest of the world; which, in their opinion, was to undergo several conflagrations, each whereof would happen after a certain period, or revolution of years. They held, that the souls of men were, after death, re-united to that subtle air, from whence they had been taken; but they believed them corruptible, and
made

made them subsist no longer, at farthest, than the conflagration of the world: nay, some of them did not allow even this privilege but to the souls of their sages. They placed the sovereign happiness of man in virtue, as the only means of procuring him a solid and lasting pleasure. The Stoics were the last of all the philosophers derived from Thales, and conclude the succession of the Ionic school.

Pythagoras, whom most believe a Samian, was the founder of the Italic sect. He continued a great while in Egypt to learn their mysteries. Some authors tell us, that he was made a prisoner by Cambyfes, who sent him to Babylon, where he became familiar with the Magi and Chaldeans, and was acquainted with the prophet Ezekiel. None of the philosophers had more disciples than Pythagoras. He enjoined an exact submission to all he said, and imposed a rigorous silence on his scholars for two years. Temperance was the virtue he most earnestly recommended, as absolutely necessary to bring the body to an entire subjection. He held the pre-existence of the soul, and the metempsychosis, or migration of souls from one body to another. Of this sect were Empedocles, Archytus, Phylolaus, &c. and to them, it must be owned, we are indebted for the true system of the universe, which places the sun in the centre, and the earth in the planetary chorus.

The sects which sprung from the Italic, may be reduced to four, the Heraclitan, the Eleatic,

Eleatic, the Sceptic or Pyrrhonian, and the Epicurean.

Heraclitus, by the advantage of a good genius, was master of that knowledge, which others acquire with difficulty and painful researches. His contemplative disposition, and contempt for the world, made him love retirement and solitude. Accordingly, he withdrew himself from the society of men, and spent his time on the top of a solitary mountain, bemoaning the follies and vanities of the world.

He held that fire is the principle of all things; for, of fire, all things are made, and into fire all things shall resolve. That all things are made by contrariety, and the whole flows like a river. That the universe was bounded, and that there is one world which was made of fire, and shall again be set on fire, at certain periods, for ever, and that this is done by fate. That the soul of the world is an exhalation of the humid parts thereof, and that the essence of fate is a ratio, or proportion, permeating through the universe, which fate is an æthereal body, the seed of the generation of all things; for all things are done by fate.

This opinion, that fire is the principle of all things, was also asserted by Hippasus the Pythagorean, whom Plutarch joins with Heraclitus; and it is probable, that Heraclitus, being his disciple, received it from him.

Democritus, the chief of the Eleatic sect, was of a temper very different from that of Heraclitus: he had a smiling countenance, and diverted himself with laughing at the ridiculous passion which men discovered for trifles, the diligence and pains they used to obtain them, and the regret and grief they shewed upon any loss and disappointment. The people of Abdera, among whom he lived, observing him to laugh frequently, began to fear he was mad, and sent for the famous Hippocrates to cure him; but that celebrated physician was soon convinced that he, instead of being mad, was one of the wisest of men. Democritus was the inventor of the doctrine of atoms, and a vacuum, or the corpuscular philosophy.

Pyrrho was the chief of the Sceptics. He affirmed men could only judge by appearances of truth and falsehood, and, therefore, concluded, that the mind ought to continue in suspense, and not determine any thing. All the subtilty of this sect lay in discovering reasons for diffidence and distrust, in things which appeared plain and evident.

The author of the last sect was Epicurus, who is said to have wrote more than any other of the philosophers. He placed the sovereign good in virtuous pleasure. The wrong interpretation of his opinions, and the abuse his disciples made of them, has brought his philosophy into disrepute, and caused it to be decried as the source of vice and immorality. He

held atoms and a vacuum to be the principles of things, and asserted, contrary to Aristotle, and others, that the world was not eternal: nay, he affirmed, there were sensible marks of its newness; urging, among other things, the rise of the arts and sciences as undeniable proofs of its small continuance. Lucretius, in his elegant poem, has given us his doctrine of the universe, providence, and the doctrine of things.

Medicine was introduced into Greece 1530 years before the Christian æra, by Melampus, an Argive; and Æsculapius and Hippocrates, the most celebrated of all physicians, were natives of Greece. Architecture, as appears from the very names of the principal orders, owes its perfection to the Greeks. Though sculpture had its origin in Asia and Egypt, it derived its lustre and perfection from Greece, where Pericles and a multitude of other excellent sculptors laboured in emulation of each other, to render sculpture honourable, by an infinite number of works, which have been and will be the admiration of all ages. The most eminent sculptors were Phidias, Lysippus, Praxiteles, Myron, Scopas, and Polycletes. Apollodorus, a native of Athens, who lived about the 93d Olympiad, carried painting to great perfection, and discovered the secret of representing to the life, and in their greatest beauty, the various objects of nature, not only by the correctness of his design, but principally by the perfection of the colours, and the proper distribution of shades
and

and lights. Zeuxis, the pupil of Apollodorus, carried the art much further than his master. Parrhasius, a native of Ephesus, was the rival of Zeuxis, and to them succeeded Apelles of Cos, Aristides the Theban, and Protogenes the Rhodian, who carried the art of painting to the greatest perfection it ever arrived at.



S E C T. VI.

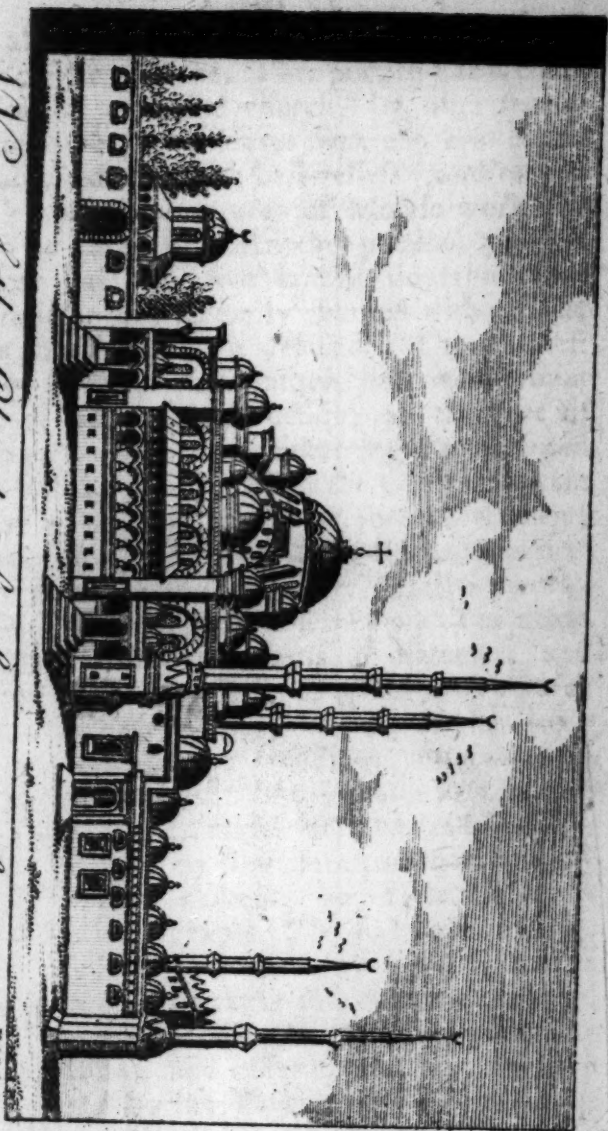
Particular Descriptions of the most remarkable public Buildings, and other singular Productions of Art in Turkey in Europe.

THOUGH the Turks affect nothing grand in the structure of their private houses, yet their mosques, or temples, and other public buildings, are extremely magnificent. The royal mosques in particular, of which there are seven so called, are very beautiful and stately edifices, and are usually the first that engage the attention of a stranger after his arrival at Constantinople. These buildings appear to much more advantage than many of our finest churches, which, in London especially, are often so closely surrounded with houses and tradesmen's shops, that there is no room to view them at a proper distance; whereas the mosques of Constantinople stand single, within spacious inclosures, planted with trees and adorned

adorned with fountains. Their architecture indeed is inferior to that of our churches, but they make an impression on the spectator, and command admiration by their largeness and solidity. The domes, it must be granted, are well executed in most parts of Turkey, especially those of the mosques, which are of an exact proportion, and accompanied with other smaller cupolas, that set them off to the eye, and give them a comely and majestic appearance. The slender steeples, or pillars, called Minarets, which are somewhat like the monument in London, terminating in small spires, with gilded crescents on the tops of them, are also a great ornament to their mosques, as well as to their cities, many of them being very tall, and works of surprising boldness.

The principal of the royal mosques, and the noblest structure in the world, according to M. Tournefort, next to St. Peter's, at Rome, is that of St. Sophia, which is advantageously situated on an eminence in one of the best and finest parts of Constantinople. It was formerly a Christian church, having been built in the sixth century, by the emperor Justinian; and though the Turks have now converted it into a mosque, it still retains its antient name. The length of this edifice is a hundred and fourteen paces, and its breadth eighty, having in the front a portico twelve yards wide, supported by marble columns, which, in the time of the Greek emperors, served for a vestibulum, where such persons were appointed to stand as
were

A View of the Church of Santa e Sophia
Bacon 1794



2 AU 58

were about to receive the sacraments, or undergo public penance. This portico has a communication with the church, by nine stately folding doors, the leaves whereof are brass, and adorned with fine bass-reliefs; and on the middlemost some figures of Mosaic work are still to be discerned. Another portico, parallel to this, has only five brazen doors without bass-reliefs, but formerly charged with crosses, which the Turks have defaced. The greatest part or body of the mosque, is covered by a dome of admirable structure, at the foot of which runs a colonade, sustaining a gallery ten yards broad, which, when the Christians were masters of it, was set apart for the women; and over this are two smaller galleries, supported by columns and arches of excellent workmanship, answering to those below. The dome is at least thirty five yards in diameter, and rests upon four huge pillars, about fifteen yards in circumference, which, as well as the dome and the walls of the building, are encrusted with white marble. The incrustations of the gallery are mosaic, mostly done with little cubes of glass, which, by time, are continually loosened from their cement, but their colour is fresh and unchangeable. The form of the dome is that of a hemisphere, or half-globe, and it is illuminated by twenty-four windows, placed round it at equal distances. It was adorned by four cherubims, and other figures, which have been defaced by the Turks, who do not admit of any imagery, or painting in their mosques. On the east side of this vast cupola is a demi-

dome, which was the sanctuary, or chancel, of the Christians; and here is now a niche, wherein the Turks keep their Koran, which may be looked upon as the Mahometan bible, containing the Revelations, doctrine, and predictions of their pretended prophet. This niche is in that part of the dome which stands towards Mecca, and the niches in all their mosques are placed in the same manner, for that way the Mahometans always turn their faces, when they say their prayers. At a little distance from the niche, is the Mufti's chair, raised on several steps; and on the side of it is a kind of pulpit, wherein certain prayers are repeated, by persons appointed for that purpose.

It is thought the Turks have pulled down some parts of this edifice, since they took it from the Christians; instead of which, however, they have added four of those tall slender minarets before-mentioned. Every royal mosque has at least two minarets, and one of them has six; but the ordinary mosques have seldom more than one. About the middle of these, on the outside, there are usually three balconies, or galleries, one above another; to which the Muefins, as the Turks call them, ascend by stairs within, and with a shrill singing tone, give notice to the people to come to their devotions,

The other royal mosques of Constantinople may be reckoned as so many copies of St. Sophia, more or less resembling the original;
but

but not one of them comes near it in the beauty of its dome, except the Solymania, so called from its founder Solyman the Second, the most magnificent of all the Turkish emperors. In some respects indeed this mosque even exceeds that of St. Sophia, its windows being larger and better disposed, its galleries more regular and stately, and the whole built of the finest stones that could be found among the ruins of Chalcedon.

Behind the mosque, under very beautiful cupolas, are the tombs of its founder and his sultana. Solyman's tomb is covered with a rich piece of embroidery brought from Mecca, and at the head of it is placed a tuft of feathers set with precious stones. This mausoleum is illuminated with seven large tapers and a great number of lamps kept continually burning.

The mosque of sultan Achmet, now called the Atmeidan mosque, as being near the Hippodrome, is so beautiful and magnificent, that it merits a particular description. It stands in the middle of a large square court, about twice as long as it is broad, on each side whereof is a range of low buildings, covered with a great many small cupolas, which have a very pleasing effect. From this court we pass into a square cloister adjoining to the western end of the mosque, having a piazza supported by antient marble pillars of various colours, and also covered with little domes. This inner square

square is beautifully paved with marble, and has an hexagonal fountain in the middle of it, covered likewise with a cupola of gilded wire. At the entrance of the mosque is a portico, sustained by stately columns of marble, and folding-doors of brass admit us into this noble edifice. The great dome stands upon four channelled pillars of white marble, each of which Sir George Wheler says are seventy of his spans in circumference ; and to this are joined four half cupolas of the same diameter with the dome, but much lower. At each corner there is also a smaller dome, and six tall minarets contribute much to the grandeur and beauty of the structure. The domes are covered with lead, and adorned at the top, as well as the minarets, with gilded globes, and crescents, the symbol of the Ottoman empire. As to the ornaments of this mosque within, they are much the same with those of other mosques, viz. balls of ivory, globes of chrystal, lustres, and the like, which make a glittering show when the lamps are lighted at their evening service.

The Validea, so called from its foundress Valide, the mother of Mahomet the Fourth, is another majestic edifice, which seems to exceed the other mosques in the delicacy of its architecture. It has a square court before it, like the inner one of Achmet's, with a fountain in the middle of it, and a piazza running round it, sustained by beautiful columns of marble, most of them fetched from the ruins
of

of Troy or Alexandria, particularly two of jasper, which are placed at the entrance of the mosque, and are admirably well polished and proportioned. The arches of the doors and windows are well designed, and the walls and pillars within are faced with blue and white tiles, like those used in our chimnies. This mosque has two minarets, and each of these is encompassed with three handsome galleries, which are finely illuminated on occasions of public rejoicing.

It is needless to describe the rest of the royal mosques, which are built much after the same model as those already mentioned; and the ornaments of all the mosques are of the same kind, only differing in number, costliness, and beauty.

The mosque of sultan Selim at Adrianople is a very magnificent fabric, much resembling that of sultan Achmet above described, except that the latter has six minarets, and the former only four. Dr. Careri tells us, that going in at the door of one of these minarets to examine its structure, he found there three winding stair-cases, each leading to a different gallery on the outside, being so contrived, that three persons may go up the minaret at once, without meeting or interrupting one another.

At Salonichi, the capital of Macedonia, there are no less than forty or fifty mosques, some
of

of which are very stately structures, particularly that which was formerly a Christian church, dedicated to St. Demetrius. This church, according to Paul Lucas, is supported by noble columns of marble, jasper, and porphyry ; and underneath it he says there is another church equally beautiful, but he was not allowed to see it, because women were employed there in working of silk. The pavement of the upper church is of Mosaic work, and in this and the lower building, they reckon upwards of a thousand columns. F. Coronelli says it has three naves, supported by abundance of magnificent pillars.

What has been said will give the reader a sufficient idea of the Turkish mosques, and therefore we need not mention any more, but proceed to a description of the Seraglio, or palace of the Grand Signior at Constantinople. This palace and its gardens form a sort of triangle, about three miles in compass, two sides whereof are washed by the sea, and the third is separated from the city by a high wall. The palace stands upon an eminence, and the gardens lie below it towards the sea, which are filled with groves of ever-greens, not only for the sake of their lasting beauty, but that the ladies of the seraglio, when they are walking, may not be seen by the neighbouring inhabitants. Mahomet the Second was the founder of this palace, which may now be looked upon rather as a collection of palaces and apartments added one to another, according to the taste and

and humour of the succeeding emperors. The materials of which it is composed are rich, but the architecture is not answerable; for the Turks, as M. Tournefort observes, have no just notion of magnificence, and if they have built fine mosques, it is chiefly owing to the model of St. Sophia which they had before them. The principal entrance into the seraglio is a huge pavilion called *Capi*, the *gate*, or *port*; from whence some imagine the name of *Porte* has been applied to Constantinople, but rather, perhaps, by way of eminence, from its admirable port or harbour. This gate is very lofty, having a semicircular arch, and beneath the bend of it there is an Arabic inscription, expressing that it was erected by the above-mentioned Mahomet. Here is a guard of fifty men, who have seldom any other weapon than a white wand or staff, and let you pass quietly into a large court-yard, not near so broad as long; on the right whereof are infirmaries for the sick, and on the left are lodges for the servants employed in the meanest offices of the seraglio. In this court there is likewise an old building with a dome over it, supposed to have been formerly a Christian temple, or part of St. Sophia; but the distance makes the last conjecture improbable.

Through another large gate we enter a second court, where there is also a guard of fifty porters, without arms as well as the former. This is a very handsome square, with several fountains in the midst of grass-plots, which are
surrounded

surrounded with trees, and the walks are paved with marble. Round the court runs a low piazza, covered with little cupolas, supported by a great number of marble columns; underneath which the Janizaries range themselves when foreign ambassadors are admitted to audience, and on other solemn occasions. On the right hand are several kitchens, which are handsome buildings with cupola's over them, that have holes made in them to let out the smoke. One of the kitchens is for the Grand Signior, another for the favourite Sultana, and a third for the ladies of the seraglio; the rest are for the commandant of the gates, the ministers of the Divan, the grand Signior's pages, the officers of the palace, the women servants, &c. who all together make up a very numerous family.

On the left hand is the Grand Signior's treasury, and a stable for his saddle horses; over which are kept his bridles, saddles, housings, &c. which are extremely splendid, being enriched with jewels and embroidery. At the farther end of this court is the hall of the Divan, which is a large but not lofty building, wherein councils of state are held, and the Grand Visier, assisted by his counsellors, determines all causes civil and criminal, without appeal. Beyond this hall no strangers are admitted except ambassadors, who pass on to the hall of audience, where the Sultan receives them on a throne almost covered with pearls and precious stones. The furniture is answerable

able to the magnificence of the hall, the ceiling and sides whereof shine with gold and azure, and are adorned with paintings after the Persian manner.

We shall not attempt to describe the interior parts of the seraglio, into which it is impossible for a stranger to gain admittance, without running the risque of paying dear for his curiosity. Some travellers indeed relate, that they have found opportunities of seeing the most private apartments of this palace, and tell us a thousand amusing stories which favour more of romance than truth, and can never gain credit but amongst the inconsiderate and injudicious part of their readers.



S E C T. VII.

Curious Remains of Antiquity in European Turkey; remarkable Laws and Customs of the Inhabitants.

REMAINS of ANTIQUITY.

THE monuments of antiquity found in European Turkey, particularly in Greece and some of the neighbouring islands, are too numerous to be taken notice of in a work of this kind; therefore the most capital remains of
 Q antiquity

antiquity only, or those which have chiefly engaged the attention of travellers, will be mentioned here.

One of the principal monuments of antiquity in Constantinople is the Hippodrome, or place for horse-races, which is a famous square in that city, now called *Atmeidan* by the Turks, which is almost a translation of its antient name; *At* in their language signifying a horse, and *Meidan* a place. It is still of the same dimensions as it was formerly, viz. about four hundred and fifty paces in length, and a hundred in breadth; but of all its fine ornaments, there are now only two remaining. The first is an obelisk of granite or Thebaic marble, of one single piece, about fifty feet high, terminating in a point, and charged with hieroglyphics now unintelligible; a proof, however, of its being very antient, and wrought in Egypt. It stands on a pedestal eight or ten feet high, on which are two inscriptions, the one in Greek, the other in Latin, importing that the emperor Theodosius caused it to be set up again, after it had lain upon the ground a considerable Time; that the engineer who undertook this task was named Proclus, and that he completed it in two and thirty days. Each side of the pedestal is likewise adorned with curious bas-reliefs, one of which on the north represents the workmen and machines whereby the obelisk was raised, and also the obelisk itself, both upright and lying upon the ground. Another range of sculptures below represents the Hippodrome as

it was formerly, with two obelisks, two men on horseback, and several people on foot. On the south side of the pedestal are carved four chariots, two of which are drawn by a pair, and the other by four horses, with each of them a driver; and on the same side are twenty or thirty figures cloathed in gowns, with others in a fighting posture, armed with bucklers. On the east side is represented a promiscuous company of men and women, dancing and playing upon musical instruments of several kinds; and higher up are two ranges, whereof little appears but the heads, which were probably intended for the spectators. The west side is adorned with figures in a suppliant posture, making presents to the emperor Theodosius, who is seated on a throne, with his two sons Honorius and Arcadius, and attended by his nobles.

This obelisk had formerly on the top of it a brazen pine-apple, which was thrown down by an earthquake, as we are informed by Nicetas, in his life of St. Ignatius, patriarch of Constantinople.

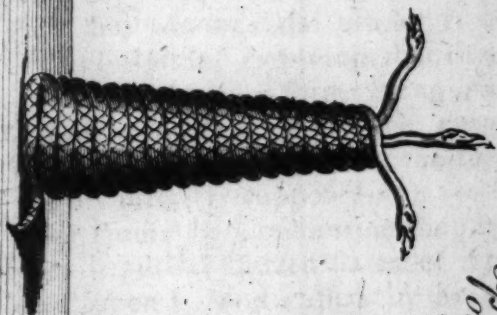
At the opposite end of the Hippodrome there is another obelisk, consisting of several pieces of white marble, and raised upon a pedestal of the same; but when Sir George Wheler saw it, in 1675, the top of it was broken off, and the rest looked ready to fall. M. Tournefort, who was at Constantinople in 1700, gives the same account of this obelisk,

and adds, that it was formerly covered with plates of brass, which he supposes were adorned with bass-reliefs and other ornaments, an inscription on its base representing it as a very wonderful work, and made still more beautiful by the emperor Constantine, the son of Romanus.

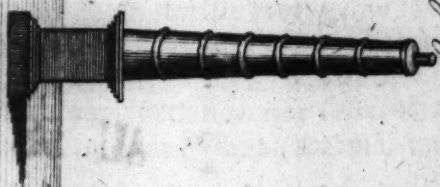
Between the two obelisks we have been describing, stood a pillar of brass, about fifteen feet high, representing three serpents twisted spirally round each other like a roll of tobacco, the wreaths diminishing gradually from the base to the top, where the heads of the serpents parted different ways, bending outwards in a triangular form. In the year 1700, the pillar was thrown down, and the heads broken off and carried away; and some years afterwards, the pillar itself was removed, but what is become of it we are not able to say. The history of this column is very uncertain; but there is great reason to suppose, with M. Tournefort, that it was brought originally from Delphos, where it served to support the famous golden tripod of Apollo. Sir George Wheler conjectures that it was antiently placed on the top of the obelisk last described.

In the great street leading to Adrianople stands the Burnt Column, as it is now called, being so black and scorched by the frequent fires that have happened near it, that one can scarce discover what it is made of: upon a narrow inspection, however, it appears to be composed

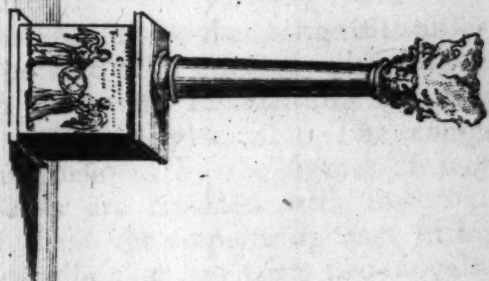
Serpentine Pillar



Torshus Pillar



Marion Pillar



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composed of several pieces of porphyry, the joints whereof are bound about with rings of brass. It is raised upon a square marble pedestal, every way four yards broad, and six yards high; and towards the top of it there is a Greek inscription, implying that this admirable piece of workmanship, being ruined by time, was erected anew by the emperor Manuel Comnenus, who reigned in the twelfth century. This pillar is supposed to have been brought from Rome by Constantine the Great, who caused a beautiful brazen statue of Apollo to be placed upon it, and called by his own name; which statue, according to history, was either struck down by lightning, or blown off and demolished, several persons being dashed to pieces by its fall. In a word, the column, though very ancient, has not suffered so much by length of time, as by fires, storms, and earthquakes.

In a part of the city, lying south from the Hippodrome, stands the historical pillar, so called, because it is covered with bass-reliefs from top to bottom, representing the victories of the emperor Arcadius. The conquered towns are denoted by the figures of women, whose heads are crowned with towers; and amongst them the emperor appears sitting in a kind of elbow-chair, with two angels over his head supporting the Labarum or standard of the christian emperors. The sculptures are much better than most of the performances of the same date, that is, in the declension of the

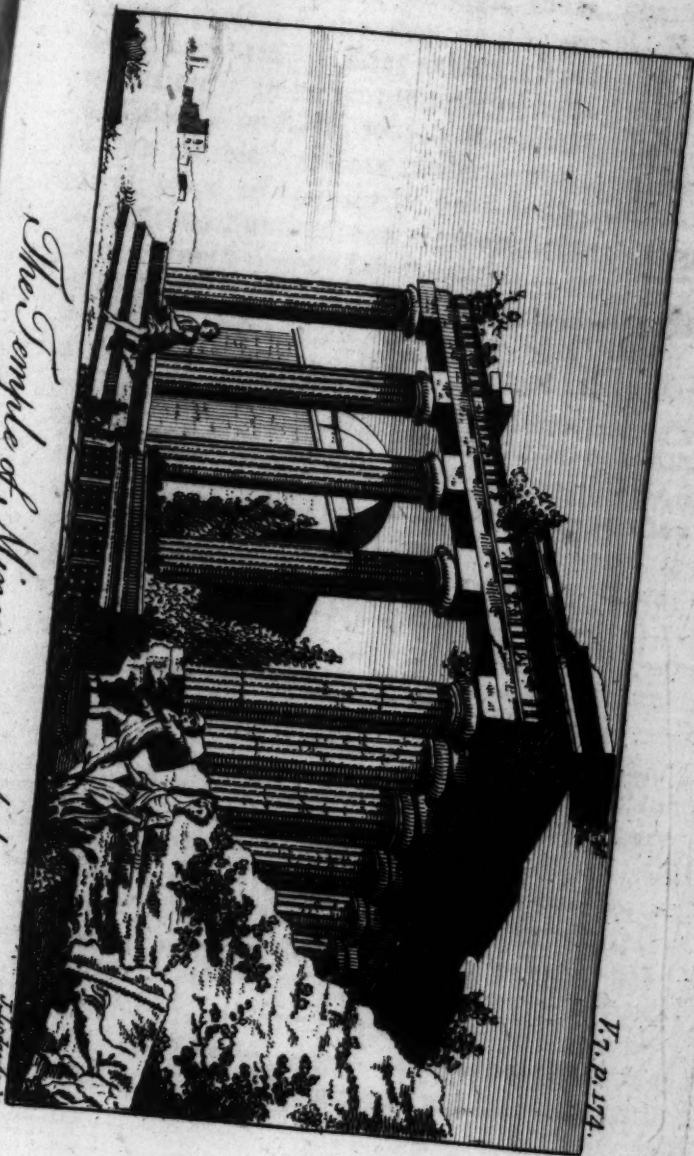
Roman empire. The horses in particular are finely done; and the artist has taken pains to make the figures appear of an equal bigness to the eye at all the distances, those near the top seeming just as large as those at the bottom. This column is of plain white marble, but blackned and disfigured by fires as well as the former. It is an hundred and forty-seven feet high, and has a pair of winding stairs within it, but so much broken and decayed, that they are entirely useless.

There is another monument of antiquity which was scarce taken notice of before Sir George Wheler, who discovered it in a private court-yard, about half way between the Hippodrome and Adrianople gate. It is a pillar erected to the emperor Marcian by Tatianus, as appears from an inscription on the pedestal, who was undoubtedly the same that assured Marcian, when he was only a private soldier, that he should live to be advanced to the imperial throne; and the event having verified the prediction, he made Tatianus governor of Constantinople. This column is of granite, and has an urn of white marble on the top of it, wherein Marcian's heart was probably deposited; and it is supposed a statue of that emperor was placed upon the urn, as the above-mentioned inscription seems to intimate.

Let us now take a view of the antiquities of Athens, which are still so numerous, notwithstanding

The Temple of Minerva at Athens.

W. P. 174.



2 AU 58

standing the havock that time and barbarous ignorance has made amongst them, that they exceed those of any city in the world, Rome only excepted. That which claims our first attention is an antient temple of Minerva, now a Turkish mosque, which is entirely built of white marble, and is perhaps the most beautiful piece of antiquity now in being. It is about two hundred and eighteen feet in length, and ninety-eight in breadth; and has on every side an ascent of five steps, that seem contrived as a basis to the portico, which is supported by channelled pillars of the Doric order, running all round the temple. These pillars are forty-six in number, two-and-forty feet high, and seventeen feet and a half in circumference. The front and frieze round about the temple, are charged with historical figures of admirable workmanship, though many of them are very much defaced. In the middle of the front is a large naked figure, which from its beard and majestic countenance is supposed to be Jupiter. The right arm is broken off, which probably held the thunder; and near this figure is another that has lost both its arms, which perhaps was a Victory, leading the horses that draw the triumphal chariot of Minerva. These horses are carved in such an exquisite manner, that the sculptor seems to have outdone himself, and to have given life to the very stone. Minerva appears in her chariot without shield or helmet, and behind her is a figure of a woman sitting with her head broken off, so that it cannot be judged for whom

whom it was intended. In the corner are two figures sitting, which Sir George Wheler says he knew from the medals and statues he had seen of them, to be the emperor Adrian, and his empress Sabina. On the left hand of Jupiter are five or six other figures, which Dr. Spon took to be an assembly of the gods, to whom Jupiter introduces Minerva, and owns her for his daughter.

The back front of this temple was adorned with figures, representing the contest between Neptune and Minerva about naming the city of Athens; but they are all fallen down, except part of a sea-horse, which may yet be distinguished. The architrave was also charged with bas-reliefs, cut in squares at several distances, which represented the wars of the Athenians, particularly their victory at Marathon, and that over the Gauls in Mysia. Within the portico we see another range of sculptures, which are undoubtedly as antient as the temple itself, and of excellent workmanship, representing sacrifices, processions, and other ceremonies of the heathen worship. This, like other Pagan temples, was almost entirely dark within, having no other light but what came in at the doors; but there is now a window at the east end of it, which was made by the Greek christians when they were in possession of it, and used it for divine service. Towards the bottom of this window there are several stones, which admit through them a yellowish light, and have been represented as miraculous,

raculous, and said to shine in the dark, but are in reality only a kind of transparent marble.

As to the founders of this beautiful temple, the body of it was built by Pericles, to which Attalus added the magnificent portico: but the emperor Adrian most probably repaired it, and adorned it with figures on each front; for the whiteness of the marble, and that emperor's statue among the figures, plainly shew those sculptures to be of a later date than the temple itself.

Not far north from the temple of Minerva stands that of Erechtheus, which is a sort of double building, as Pausanias describes it, thro' the lesser part whereof we enter into the larger. The roof of the large building is supported by channelled Ionic pillars, but the capitals seem to be a mixture of the Doric and Ionic orders.

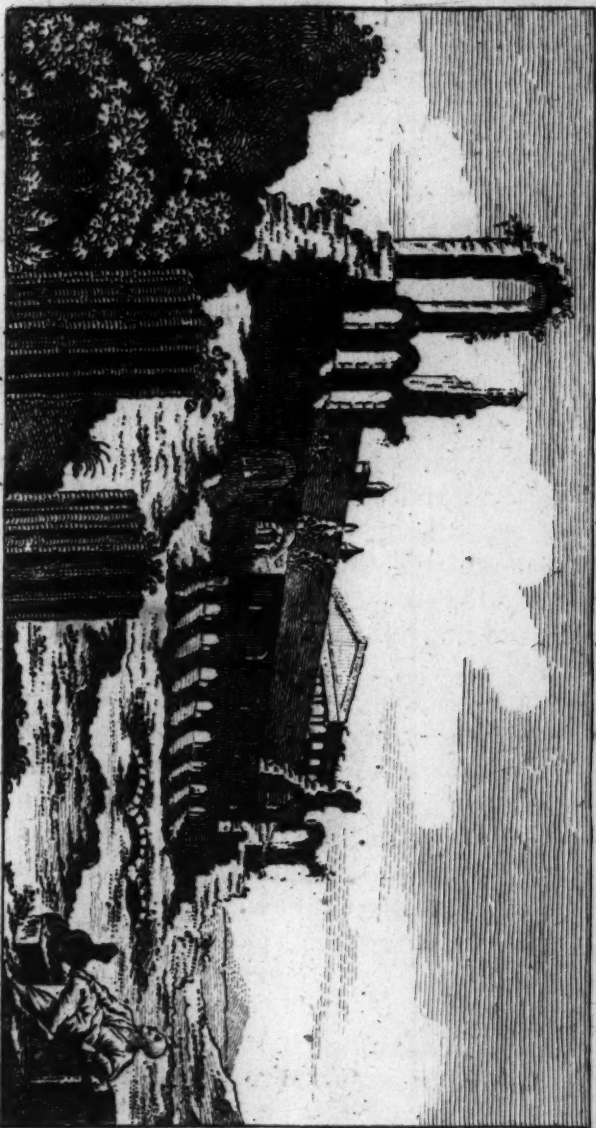
On the south side of Minerva's temple are some ancient ruins, with some statues of women in the walls, which Dr. Spon imagined to be the Graces. They are cloathed indeed, contrary to the usual manner of representing those deities; but that the Graces were not always represented naked, appears from Pausanais, who has described their statues and temples.

Descending from the Acropolis or castle, in which are the antiquities already mentioned, we come to the remains of the theatre of Bacchus,

thus, the ancient seats whereof are ruined; but where they were, and their distance from each other, may still be discerned. The front towards the sea has best escaped the injuries of time; for there are three rows of arches remaining, one above another; but the semicircular area below the seats, and the scene, or that part of the theatre assigned for the actors, are almost filled with the ruins of the rest of the building. The whole structure was of white marble, and antiently adorned with the statues of Menander, Euripides, Sophocles, and Æschylus, their most celebrated dramatic writers.

At a little distance from the theatre, the foundations of some arches are to be seen, supposed to be the remains of the portico of Eumenes, where the actors got their plays by heart, and the citizens used frequently to walk for the sake of the air and conversation.

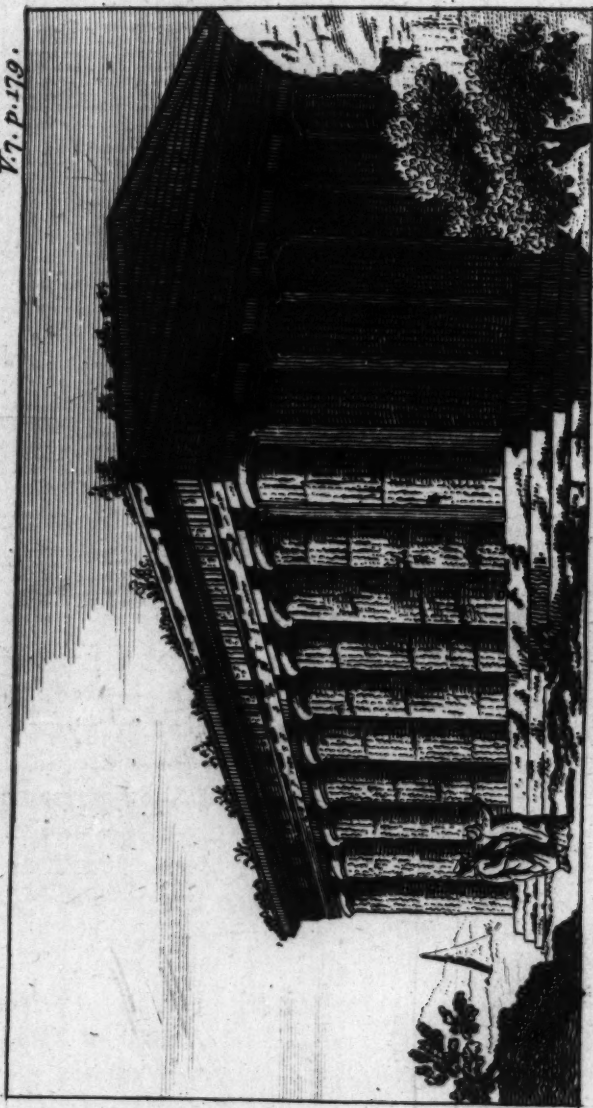
In the side of the rock, whereon the castle stands, there is a little church, or rather grotto, the front whereof is adorned with three marble pilasters of the Corinthian order, sustaining an architrave of the same, with a sedent figure on the top of it without a head, and several Greek inscriptions, from whence it is supposed to have belonged to a Gymnasium, or to have been a monument erected in honour of such as had been victors in the gymnastic exercises, which were wrestling, running, throwing the quoit, and several others, contributing either to the
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The Theatre at Athens.

Engraving.

V. 7. p. 179.



The Temple of Theophrastus.

J. Lodge sculp.

preservation of health, the defence of the body, or mirth and recreation.

To the south-east of the castle are yet standing seventeen beautiful columns of the Corinthian order, called Adrian's pillars, as being thought to be the remains of that Emperor's palace, which was probably the greatest ornament of Athens, when the structure was entire. They are of admirable white marble, above fifty feet high, including the capitals and bases, and about eighteen in circumference. It appears, however, from a view of the place, that there were originally six rows of them, twenty in each row, which supported a portico of surprising beauty and magnificence, inclosed within a cloister, wherein were divers little rooms, whose cielings were of alabaster gilt with gold, and the whole adorned with fine statues and paintings.

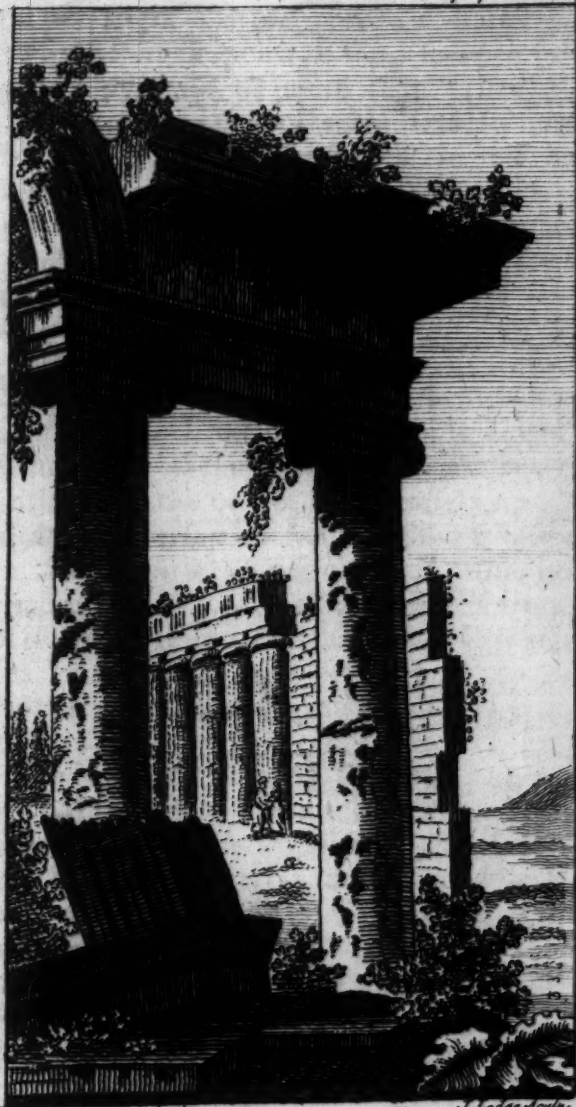
Pausanias likewise mentions an excellent library collected by Adrian, and a gymnasium bearing his name, of which there are no footsteps to be seen; but there are some remains of an aqueduct begun by that Emperor, and finished by Antoninus Pius, as appears from an inscription on an architrave supported by two Ionic pillars.

Just without the city stands the temple of Theseus, another noble monument of antiquity still remaining entire, which as to its matter, form, and order of architecture, exactly resembles

The Temple of Theseus.

seembles that of Minerva, but its dimensions are not so large. With respect to the workmanship, it may be deemed a master-piece; nor is it easy to be paralleled, much less exceeded, by any other structure. Within the portico, at the west end, there is a bas-relief representing the battle of the Centaurs; and at the east end there seems to be a continuation of that history: there are likewise several figures of women, which Mr. Vernon takes to be Pirithous's bride, and the other ladies who attended at the wedding. On the outside of the portico, in the spaces between the triglyphs, are represented several feats of Theseus, particularly in wrestling, where all the locks and postures of that art, in which he excelled, are admirably well expressed. He is also exhibited as encountring bulls, bears, and other monsters: but time has pretty much injured many of these figures, the temple having been built soon after the battle of Marathon, when the Athenians, under the conduct of the brave Miltiades, gained so signal a victory over the Persian army, that is, almost five hundred years before the birth of our Saviour.

The Tower of Andronicus, or Temple of the Eight Winds, is yet standing at Athens, and is worth a traveller's observation. It is an octagonal structure, on each side of which is a winged figure representing one of the winds, with the name wrote over it in Greek capitals; and underneath these figures, only separated from them by a frieze, are so many sundials, accom-



The Ruins of Hadrian's Aqueduct at Athens.

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accommodated to the different sides of the tower. The roof of the building consists of little planks of marble, broad at bottom, but meeting all in a point at top, so as to form a kind of pyramid of more than thirty sides; on the summit whereof there was formerly a brazen triton, with a switch in his hand, pointing to the quarter from whence the wind came; but this weather-cock is long since destroyed. The figures are of excellent workmanship, each expressing the nature of the wind it is intended to represent.

In the south-west part of Athens stands a beautiful little structure, commonly called the Lanthorn of Demosthenes, on account of a tradition that the orator shut himself up there, in order to pursue his studies without interruption, having first cut off one half of his beard, the more effectually to restrain himself from appearing in public: but the real design of this piece of antiquity will best appear by considering its form and ornaments. It is a round edifice of white marble, only six feet in diameter within, and shaped so much like a lanthorn, that it is no wonder it has obtained that name. The roof is sustained by six fluted columns of the Corinthian order, nine feet and a half high; and the space between the columns is taken up with pannels of marble, of one stone from the top to the bottom. The frieze above these columns consists of one circular stone, and another entire stone forms the roof or cupola, which is carved so as to re-

semble scales lying one over another, and crowned with a sort of stem like the socket of a candlestick, as Sir George Wheler represents it, or rather, as Mr. Vernon, like a plume of feathers. On the frize are beautifully represented in relievo several of the labours and exploits of Hercules, as is judged from some of the figures being cloathed with lions skins. There is also an inscription on the frize, which gives some reason to conjecture that this fabric was a temple dedicated to Hercules, by those who had been victors in the public games. Be this as it will, it appears from the same inscription to be of great antiquity, and to have been built above three hundred and thirty years before the birth of our Saviour.

Some remains of the Odeum, or Music-Theatre, built by Pericles, are still to be seen, being the foundations of a semicircular structure, about a hundred and forty paces in diameter. Within the area there is a square elevation five or six feet high, with steps to the top of it; and on each side are several seats or stone-benches, supposed to have been intended for the musicians. From these seats, however, Sir George Wheler seems rather to think this was the place where the senate or court of the Areopagus used to assemble, which was so famous for its antiquity and the justice and impartiality of its decrees.

There are several other noble monuments of antiquity to be seen at Athens, particularly the
remains

remains of a Stadium, built by Lycurgus, and enlarged by Herodes Atticus ; which was of such a stupendous bigness, according to Pausanias, that it looked like a mountain of white marble. Very little of the stone-work is at present remaining, but its form and dimensions are yet to be discerned.

Adrian's gate, and part of the temples of Augustus and Jupiter Olympius, are worth the attention of the curious.

To these we might add many inscriptions, bas-reliefs, and things of the like nature, which our design does not require us to set down or describe.

At Corinth, and about the neighbouring Isthmus, so famous for the solemn games there celebrated by the antients, some remains of antiquity are yet to be discovered, but none so entire as those we have been describing ; and the chief of those are only ten or eleven pillars standing upright, which from their situation are judged to have supported the portico of some temple. They are of the Doric order, fluted, and of a common hard stone ; but their proportion seems to vary considerably from the rules of the antients, their circumference being eighteen feet, and their height not much above twenty. On the north side of the market-place there is also a heap of ruins of brick-work, supposed to be either part of a temple, or of a Roman bath.

At mount Oneius, on the isthmus, are to be seen the ruins of the town, of the Isthmian theatre, and of several stately temples and other edifices mentioned by Pausanias ; and in many places one may discern the foundations of the walls built by the Lacedæmonians from one sea to the other, to prevent the incursions of their enemies. They were repaired by the Venetians when they were in possession of the Morea, but they have been since destroyed.

Let us now leave the continent, and survey the antiquities to be met with in the island of Delos, which was famed among the ancients for being the birth-place of Apollo and Diana. In this island was a magnificent temple dedicated to Apollo, which is now a vast heap of ruins, lying in such a confused manner, that it is impossible to determine even the form of that structure. Amongst the ruins are the remains of a Colossal statue of Apollo, which has lost its head, arms, and feet ; and the rest of it is broken into two pieces, the one consisting of the belly and thighs, the other of the back and shoulders. The back is two yards broad, and the other parts proportionably large ; so that M. Tournefort imagines it was placed on the frontispiece of the temple, and appeared no bigger than the life ; from whence one may judge of the height of that edifice. This statue appears to have been an admirable piece of sculpture, the rings of hair falling down the shoulders being particularly beautiful. A large piece of marble, fifteen feet and a half long,
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ten feet nine inches broad, and two feet three inches thick, is to be seen among the ruins, which was undoubtedly the plinth of this gigantic statue, an inscription upon it shewing that it was dedicated to Apollo by the people of Naxos.

Not far from the statue, Sir George Wheler found half the body of a woman, the drapery whereof was carved so well, that it seemed to be the work of no less a master than the former. Just by this he saw the body and fore part of a centaur, on which the sculptor had so well displayed his skill, that life and vigour appeared in every vein and muscle. The head and neck of a horse, part of the figure of a woman, and several fragments of lions, are also found in these noble ruins, which in general consist of huge pieces of broken columns, architraves, bases, capitals, &c. all mingled together in the utmost disorder and confusion.

At a small distance from the ruins of this temple lie those of a portico, which from an inscription appears to have been erected by Philip, King of Macedon, and consists of columns and architraves truly magnificent. These architraves have escaped breaking and carrying away, being incased into the tops of the columns, which are angular towards the base, and channelled upwards, composed of several pieces, and of the Corinthian order. Each architrave is one foot eight inches deep, ten feet in length, and two and a half in thick-

ness, and the largest diameter of the columns is two feet four inches.

About three hundred paces from this portico we come to the remains of a beautiful marble theatre, whose circumference is five hundred feet, and its diameter, including the steps, two hundred and fifty. Just before the opening of the theatre there are eight or nine vaults in a row, separated from each other by a wall, in which there is a little arch, serving for a passage from one to another. Dr. Spon imagined them to have been a kind of cisterns or reservoirs of water, but it is more likely they were to keep lions and other wild beasts in, which used to be baited in the theatres of the antients. These cellars were not arched over, but covered with huge pieces of marble, cut like beams, with proper openings to let in the light, and to bring the animals in and out.

Near the foot of mount Cynthus, which runs almost cross the island, we find the remains of a temple, as they are supposed to be, viz. nine pillars of marble disposed in a circle, three standing upright, and six fallen to the ground. This temple had a Mosaic pavement, and underneath these columns most beautiful vaults have been discovered.

This mountain is steep and craggy, consisting of little else but a kind of grevish marble; and Sir George Wheler imagines, that the way up the mountain, which is steep, broad, and winding,

winding, was originally a quarry from whence the marble was dug, it resembling many quarries he afterwards saw in Attica. On the top of the hill are to be seen the foundations of a citadel which commanded the whole island; and all the way up, on each side of the road, it appears to have been formerly adorned with temples, porticos, or other structures, as the foundations of walls, and a vast number of columns, pedestals, architraves, and other fragments of excellent marble, sufficiently demonstrate.

In another part of the island, not far from the sea, there are still standing six or seven pillars of granite, which the people of the neighbouring islands, for Delos is not inhabited, call the School, from a tradition that there was antiently a gymnasium in that place. Between twenty and thirty columns are lying upon the ground near those which are standing, most of them nine or ten feet high, but of different diameters, and seem to have supported a square structure; but that it was a gymnasium is not very likely, though probably there was one in the island.

About a hundred paces from this supposed gymnasium we see an oval basin, being almost three hundred feet long, and two hundred broad, lined round with a wall as high as its banks, which is faced with a thick cement proper to contain water. This is thought to have been a naumachia, or place for naval exercises;

exercises ; for though we have not the positive testimony of antient authors, that they used to represent sea-fights at Delos, the bason seems evidently intended for that purpose. We must not imagine that large vessels were used on these occasions, but such as were suitable to the dimensions of the place, and the depth of the water.

On a little eminence near this bason lie the ruins of some stately temple, if we may judge from the number of marble columns, half fluted and half pannelled, about two and twenty inches in diameter ; and more especially from the fragment of an altar found amongst them, adorned with festoons, bunches of grapes, and heads of oxen. The upper part of this altar is somewhat hollow, proper for the burning of incense ; and by this cavity we may distinguish altars from the pedestals of statues. These altars are frequent in Delos, and in the adjacent island of Rhenia.

The remains of another noble structure are to be seen at that end of the bason which faces the temple of Apollo. A vast number of pillars appear to have formed a square as broad as the lesser diameter of the bason ; and perhaps sustained a portico built by Dionysius Eutyches, an architrave and altar with that prince's name being found very near these ruins. Some of the columns are yet standing, but most of them are fallen down and broken to pieces. There are plain ones of twenty inches

inches diameter, and others of eighteen cut in pannels, both intermixed with huge pillars of that granite, with which mount Cynthus abounds.

From this portico to the Little Port of Delos there is nothing but fragments of marble columns, altars, &c. which have such an appearance of magnificence, that they are probably the ruins of Latona's temple.



REMARKABLE LAWS, *and* CUSTOMS.

IN Turkey there is no hereditary nobility, and the Beglerbegs, or governors of provinces, are never succeeded either in their offices or estates by their children. Nor are the great offices or posts in the government ever given to native Turks; but to the Grand Signior's slaves, taken in war, or purchased young, and educated in the Seraglio, whose relations being unknown to them, and having no interest or friends in the government assigned them, cannot expect any success, if their ambition should put them upon rendering themselves independent, or incite them to enter into conspiracies against their sovereign.

In Turkey, liars, when convicted of any notorious falsehoods, are burnt in the forehead with a hot iron.

The custom of adoption is very common among the Turks, and yet more amongst the Greeks and Armenians. Not having it in their power to give their estates to a friend, or distant relation, to avoid its falling into the Grand Signior's treasury, when they are not likely to have any children of their own, they chuse some pretty child of either sex amongst the meanest people; and carry the child and its parents before the Cadi, and there declare they receive it for their heir. The parents at the same time renounce all future claim to it, a writing is drawn and witnessed, and a child thus adopted cannot be disinherited.

The most extraordinary custom among the Armenians is their matrimony. They are promised very young, but the espoused never see one another till three days after their marriage. The bride is carried to church, with a cap on her head, in the fashion of a large trencher; and over it is a silken veil, which covers her entirely to her feet. The priest asks the bridegroom, whether he is willing to marry that woman, be she deaf, be she blind; to which having answered in the affirmative, she is led home to his house, accompanied with all the friends and relations on both sides, singing and dancing; and is placed on a cushion in the corner of the sofa. but her veil is never lifted up, not even by her husband.

When a Turk has divorced his wife in the most solemn manner, he can take her again
upon

upon no other terms, than by permitting another man to pass a night with her; and there are examples of several who have submitted to this law, rather than not have their wives back again. Any woman that dies unmarried in Turkey, is looked upon to die in a state of reprobation, from a belief that the end of the creation of woman was to increase and multiply; and that she is only properly employed in the works of her calling, when she is bringing forth children, or taking care of them, which they believe are all the virtues that God expects from her. Many of the Turkish women are very superstitious upon this point, and will not remain widows ten days, for fear of dying in the reprobate state of a useless creature: but those that like their liberty, and are not slaves to their religion, content themselves with marrying when they are afraid of dying.

There is something very fantastic in the rites of the Turkish dervises, which they perform, every Tuesday and Friday, in the following manner: They meet together in a large hall, where they all stand with their eyes fixed on the ground, and their arms across, while the Imaum, or preacher, reads part of the Alcoran, from a pulpit placed in the middle; and when he has done, eight or ten of them make a melancholy concert with their pipes, which are no unmusical instruments. Then he reads again, and makes a short exposition on what he has read, after which they sing and play, till their superior (the only one of them dressed in green,

the rest wearing only a piece of coarse white cloth wrapped about them, with their legs and arms naked) rises and begins a sort of solemn dance. They all stand about him in a regular figure, and while some play, the others tie their robe, which is very wide, fast round their waist, and begin to run round, with an amazing swiftness; and yet with great regard to the music, moving slower or faster as the tune is played. This lasts above an hour, without any of them shewing the least appearance of giddiness, tho' there are some dervises, who frequently mix in this dance, under seven years of age. At the end of the ceremony, they shout out, 'There is no other God, but God, and Mahomet his Prophet;' after which they kiss their superior's hand, and retire. The whole is performed with the most solemn gravity; and nothing can be more austere than the form of these people, who never raise their eyes, and seem devoted to contemplation.

The passage of the Grand Signior to the mosque is thus described by a celebrated lady of great distinction, who, in the year 1717, was an eye-witness of the procession, being then in a public character at the Porte. The emperor was preceded by a numerous guard of janizaries, with vast white feathers on their heads, as also by the foot and horse guards, and the royal gardeners, which are a considerable body of men, dressed in different habits of fine lively colours, so as to appear at a distance like a parterre of tulips. After them the Aga of the janizaries,

nizaries, in a robe of purple velvet, lined with silver tissue, his horse led by two slaves richly dressed. Next him, the kyssier aga, or chief guardian of the ladies of the seraglio, in a deep yellow cloth, lined with fables. Last came his Sublimity himself, arrayed in green, lined with the fur of a black Muscovite fox, which is supposed worth a thousand pounds sterling, and mounted on a fine horse, with furniture embroidered with jewels. Six more horses, richly caparisoned, were led after him, and two of his principal courtiers bore, one his gold, and the other his silver, coffee-pot on a staff; another carried a silver stool on his head, for him to sit on: they were all distinguished, according to their ranks, by various dresses and turbants, and they were extremely rich and gay, to the number of some thousands.

When the Turks are at war with any other power, and the Grand Signior leads his army in person, every company of tradesmen in the empire are obliged to make him a present, according to their ability. Upon this occasion, there is a procession, which passes through the principal streets, and is by the lady before mentioned, who saw one at Adrianople in the year 1717, described as follows: It was preceded by an Effendi, mounted on a camel richly furnished reading aloud the alcoran, finely bound, laid upon a cushion. The Effendi was surrounded by a parcel of boys in white, singing some verses of it, followed by a man dressed in green boughs, representing a clean husband-

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man, sowing seed. After him several reapers with garlands of ears of corn, as Ceres is pictured, with scythes in their hands, seeming to mow. Then a little machine, drawn by oxen, in which was a wind-mill, and boys employed in grinding corn, followed by another machine drawn by buffalos, carrying an oven, and two more boys, one employed in kneading the bread, and another in drawing it out of the oven. These boys threw little cakes on both sides amongst the crowd, and were followed by the whole company of bakers, marching on foot, two by two, in their best cloaths, with cakes, loaves, pasties, and pies of all sorts on their heads; and after them, two buffoons, or jack-puddings, with their faces and cloaths smeared with meal, who diverted the mob with their antic gestures. In the same manner followed all the companies of trade in the empire, the nobler sort, such as jewellers, mercers, &c. finely mounted, and many of the pageants that represent their trades perfectly magnificent; amongst which that of the furriers made one of the best figures, being a very large machine, set round with the skins of ermines, foxes, &c. so well stuffed, that the animals seemed to be alive, and followed by music and dancers. In this manner, it is believed, twenty thousand men passed, all ready to follow his Sublime Highness, if he commanded them. The rear was closed by the volunteers, who came to beg the honour of dying in his service. These were all naked to the middle. Some had their arms pierced through with arrows left sticking

sticking in them; others had them sticking in their heads, the blood trickling down their faces. Some flashed their arms with sharp knives, making the blood spring out upon those that stood there; and this is looked upon as an expression of their zeal for glory. It is said, that some make use of it to advance their love, and when they are near the window, where their mistress stands, all the women in town being veiled to see the spectacle, they stick another arrow for her sake, who gives some sign of approbation and encouragement to this gallantry.

The Turkish camp makes a very magnificent appearance. The tents of the great men are rather like palaces than tents, taking up a great compass of ground, and being divided into a vast number of apartments; they are all of green, and the bassas of three tails have those ensigns of their power placed in a very conspicuous manner before their tents, which are adorned on the top with gilded balls, more or less, according to their different ranks.

The houses in Turkey, great and small, are divided into two distinct parts, which only join together by a narrow passage; the first house has a large court before it, and open galleries all round it. These galleries lead to all the chambers, which are commonly large, and with two rows of windows, the first being of painted glass; they seldom build above two stories, each of which has galleries. The stairs are broad, and not often above thirty steps. This

is the house belonging to the lord, and the adjoining one is called the Haram, that is the ladies apartment; for the name of *seraglio* is peculiar to the Grand Signior. This apartment has also a gallery running round it, towards the garden, to which all the windows are turned; and the same number of chambers as the other, but more gay and splendid, both in painting and furniture: the second row of windows is very low, with grates like those of convents; the rooms are all spread with Persian carpets, and raised at one end of them about two feet: this is the sofa, which is laid with a richer sort of carpet; and all round is a sort of couch, raised half a foot, covered with rich silk, according to the fancy or magnificence of the owner: round about this are placed, standing against the wall, two rows of cushions, the first very large and the next little ones; and here the Turks display their greatest magnificence. They are generally brocade or embroidery of gold wire upon white satin; and nothing can look more gay and splendid. The rooms are low, and the cieling always of wood, generally inlaid or painted with flowers; they open in many places, with folding doors, and serve for cabinets; between the windows are little arches, to set pots of perfume, or baskets of flowers; and they have marble fountains in the lower part of the room, which throw up several spouts of water, giving at the same time an agreeable coolness, and a pleasant dashing sound, falling from one basin to another. Some of these are very magnificent.

Each

Each house has a bagnio, which consists generally in two or three little rooms, leaded on the top, paved with marble, with basons, cocks of water, and all conveniencies for either hot or cold baths.

The women's apartments being always built backward, and out of sight, have no other prospect than the gardens, which are inclosed with very high walls. There are no parterres in them like ours, but they are planted with high trees, which give an agreeable shade, and afford a pleasing view. In the midst of the garden is the chiosk; that is, a large room, commonly beautified with a fine fountain in the middle of it: it is raised nine or ten steps, and inclosed with gilded lattices, round which vines, jassmines, and honeysuckles make a sort of green wall. Large trees are planted round this place, which is the scene of the greatest pleasures, and where the ladies spend most of their hours, employed by their music or embroidery. In the public gardens there are public chiosks, where people go that are not so well accommodated at home, and drink their coffee, sherbet, &c.

The manner of building in Turkey is very agreeable, and proper for the country. It is true, the Turks are not at all solicitous to beautify the outside of their houses, which are generally built of wood, and therefore in many respects inconvenient; but this is not to be charged on the bad taste of the people, but on the

the oppression of the government. Every house, at the death of its master, is at the Grand Signior's disposal, and therefore no man cares to make a great expence, which he is not sure his family will be the better for. All their design is to build a house commodious, and that will last their lives; and they are very indifferent, if it should fall down the year after.

Many of the customs and much of the dress that obtained among the ancient Greeks, even in the days of Homer, are yet retained in Turkey. Princesses and great ladies still pass their time at their looms, embroidering veils and robes, furrounded by their maids, who are always very numerous, in the same manner as we find Andromache and Helen described by Homer. The description of the belt of Menelaus exactly agrees with those belts that are now worn by the great men in Turkey, fastened before with broad golden clasps, and embroidered round with rich work. The snowy veil that Hellen throws over her face is still fashionable, and a number of old Bashaws, with their reverend beards, are frequently seen sitting, basking in the sun, and resembling Homer's description of king Priam and his counsellors. The manner of dancing is certainly the same that Diana is sung by Homer to have danced on the banks of the Eurotas. The great lady still leads the dance, and is followed by a troop of young girls, who imitate her steps; and, if she sings, make up the chorus. The tunes are extremely gay and lively, yet with something in them
wonderfully

Engrav'd for the Beauties of Nature & Art display'd. Printed for J. Payne at the Feathers in Pater noster Row London



wonderfully soft. The steps are varied, according to the pleasure of her who leads the dance, but always in exact time, and infinitely more agreeable, in the opinion of our judicious author, than any of our dances.

The manners of the Turks give also a great light into many passages in scripture, which appear odd to us; and their phrases are commonly what we call scripture language. The vulgar Turkish is very different from what is spoke at court, or amongst the people of figure, who always mix so much Arabic and Persian in their discourse, that it may very well be called another language. Besides this distinction, the Turks have what they call the sublime, that is, a stile proper for poety, which is the exact scripture stile.



Of A S I A in general.

A S I A is a quarter of the world, which, in many respects, claims a pre-eminence over the other three. It was in Asia that the Creator of the universe planted the delicious garden of Eden, in which he placed the original parents of mankind; and Asia became again the nursery of the world, when it had been destroyed by the Flood; the descendants
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of Noah dispersing from thence their various colonies into all the other parts of the globe. It was in Asia that God chose to fix his favourite nation the Hebrews; in the same country our blessed Saviour accomplished the great work of our Redemption, and from thence the light of his glorious gospel was spread into all nations by his disciples and followers. In Asia the first cities were built, and the first monarchies were founded, even whilst the rest of the world were destitute of inhabitants.

To these advantages may be added the fertility of the soil of Asia in general, the serenity of its air, the deliciousness of its fruits, the salubriousness of its drugs, the fragrancy and balsamic quality of its plants, gums, spices, &c. the variety, beauty, and value of its gems, the fineness of its silks, the richness of its metals, and many more of the like nature; on which account it has always been looked upon as the most desirable part of the world, though in some respects it has had a rival since the discovery of America. It must be owned indeed, that since the Turks have been in possession of a very considerable part of Asia, it has quite lost its ancient splendor, and countries naturally rich and fertile, are almost reduced to a wild uncultivated desert: but notwithstanding all the indolence and tyranny of the Turks, their Asiatic dominions afford a great abundance of valuable commodities, for which they are resorted to by merchants of other nations. These countries likewise afford the antiquarian abundance

dant matter of entertainment, being overspread, as it were, with the ruins of great and opulent cities, celebrated both in sacred and profane history.



CHAP. I.

Of TURKEY in ASIA.

SECT. I.

A general Account of Turkey in Asia.

TURKEY in Asia is situated between 12 and 45 degrees north latitude, and between 27 and 60 degrees east longitude.

It is bounded on the north by the Black Sea and Circassia; on the east by Persia, and the Gulphs of Boffora and Ormus; on the south by the Indian Ocean, and on the west the Archipelago, the Mediterranean Sea, and the Red Sea.

Turkey in Asia is divided into thirteen provinces: 1. Natolia proper in Asia Minor, where are the cities of Bursa, Nice, Smyrna and Ephesus. 2. Amasia, which contains the cities of Amasia, Sinope and Trapezond. 3. Aladulia, where are the cities of Ajazzo and Marat. 4. Caramania, where are the cities of Terasso and Satalia. 5. Syria and Palestine, or the Holy Land, which contains the cities of
Jerusalem,

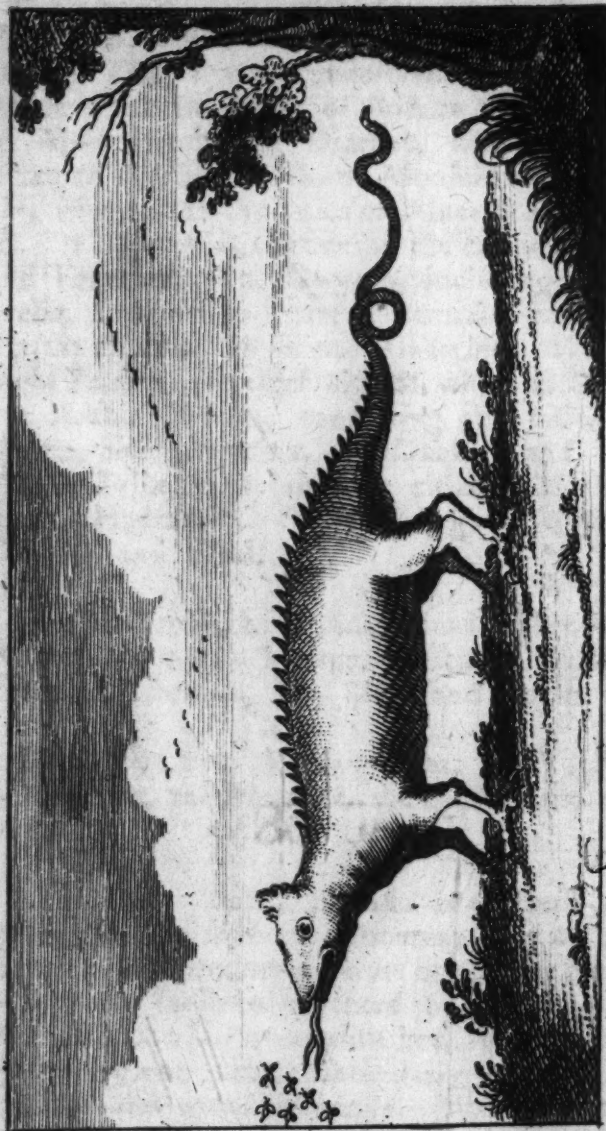
Jerusalem, Damascus, Antioch, Aleppo, Tyre Sidon, Tripoli and Scanderoon. 6. Chaldea, where stand the cities of Boffora and Bagdat. 7. Mesopotamia, or Diarbec, where are the cities of Diarbec, Orfa and Mouful. 8. Assyria, where stand the cities of Nineveh and Betlis. 9. Armenia, containing the cities of Van and Erzerum. 10. Georgia, including Mingrelia, Imaretta and part of Circassia, containing the cities of Gonie and Amarchia. 11. Arabia Petræa, the chief city of which is Suez. 12. Arabia Deserta, containing the cities of Mecca, Siden, Medina, and Dhafar; and 13. Arabia Felix, containing the cities of Mocho, Sibit, Hadramut, Casseem, Segur, Muscat, Jamama and Elcalf.

The most remarkable mountains in this country are, Olympus, Taurus, Caucasus, Ararat, Lebanon, Hermon, Ida, Sinai and Horeb.

The rivers are, the Euphrates, the Tigris, the Orontes, the Meander, the Sarabat and the Jordan.

The air of Turkey in Asia is different according to the different climates; that of the northern provinces is temperate but not healthy, being very frequently visited by the plague. The air of Arabia is excessive hot, and in many places very unhealthy, particularly that part of it which lies upon the coasts. The winds are also hot and poisonous, as those on the opposite shores of Persia; and the sands are very troublesome

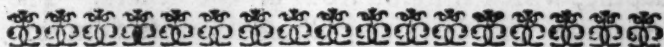
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A Chameleon

some and dangerous, being driven like clouds by the winds, infomuch that whole caravans, it is said, have been buried and lost in those deserts by a storm of wind and sand. As the air is different, so is the soil, which in some parts is very fruitful, and produces all the necessaries and conveniencies of life in great perfection, variety, and abundance; while other parts of these extensive dominions are perfect uninhabitable deserts.



S E C T. II.

A particular Account of the most curious natural Productions of Turkey in Asia, in the Animal, Vegetable, and Fossil Kingdoms; of remarkable Mountains; of Medicinal and other singular Springs; and of Seas, Lakes, Rivers, and other natural Objects of Curiosity.

A N I M A L S.

THE Chameleon, one of the greatest curiosities in the animal kingdom, and the subject of much speculation among ancient and modern writers of Natural History, is a native of Arabia and Natolia, particularly of the neighbourhood of Smyrna, where it breeds in old walls, and other ruinous places. It is a species of Lizard, with a long rounded tail, and five toes on each foot, two or three of which adhere together. There are four distinct varieties of this animal. 1. The Asiatic or Arabian

Arabian kind, which is small, and hardly exceeding the green lizard in size: this of a whitish colour, variegated with yellowish and reddish spots. 2. The Egyptian, which is twice as large as the Arabian, and is of a middle colour between the whitish hue of the Arabian and a fair green: this changes its colour to a paler or deeper yellow. 3. The Mexican. And fourthly, a kind sometimes shewn about as a sight, and met with by J. Faber Lynceus at Rome, which differed from all the others. The Arabian and Mexican Chameleon seldom exceed six inches in length; the Egyptian is nine or more; its head is large, but the thickness of its body is not to be determined, as the creature alters that at pleasure, as it more or less inflates its body; and this inflation not only goes thro' the whole body but into the legs and tail. It is not at all like the breathing of other animals, for the body when thus puffed out will remain so two hours, only gradually and insensibly sinking all the time, and afterwards will be inflated again, but that much more quickly than it subsided. It is able a long time to continue either of these states, but more frequently remains empty for a considerable space, in which time, though before it appeared in good case, it looks miserably lean and lank, and its back-bone may be seen perfectly, its ribs counted, and even the large tendons of the feet distinctly observed by the naked eye through the skin. The back-bone, however, is not serrated, as many have affirmed, but makes, in this its lean state, a plain sharp ridge, and the whole animal looks so miserably meagre,

meagre, that it has not unaptly been called a living skin. The head is very like that of some fishes, and is joined almost immediately to the breast, the neck being extremely short, and has at the sides two cartilaginous eminences, in the manner of fishes. It has a crest standing up in the middle of the forehead, and two others over the eyes, and between the crests there are two remarkable depressions, the nose and mouth running from the eyes with a double edge to the end of the snout, resembling those of a frog: at the extremity of the nose there are two perforations, which seem to serve as nostrils; the mouth being always kept close shut, and the creature appearing to have no power of respiring but by means of these. Its mouth is furnished with teeth, or rather with continued denticulated bones. These are of no service to the creature in eating, since it preys on flies and swallows them whole; but may serve for its defence in holding fast a stick in its mouth; which, according to *Ælian*, this creature does, placing the stick cross-ways, to prevent its being swallowed by serpents.

The chameleon has been supposed, by both the antients and moderns, to have a faculty of changing its colour, and assuming that of the objects near it. *M. Perrault* assures us, that the colour of the chameleon, when at rest and in the shade, is somewhat various; that at *Paris* was a bluish grey; but, when exposed to the sun, became a darker grey; and its less illuminated part changed into divers colours, forming

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spots half as big as one's finger end; some of an isabella colour; the grains not illuminated at all, resembling a cloth of divers colours. That described by Dr. Goddard in the *Philosophical Transactions*, was of several colours; a green, a sandy yellow, and a deeper yellow, or liver colour; but one might easily imagine some mixture of all colours. He adds, that upon rubbing or warming, it suddenly became full of black spots, as big as a large pin's head, equally dispersed on the sides, all which would afterwards vanish. M. Perrault observes something like this of the Paris chameleon, that upon handling or stirring, it would appear stained with dark spots, bordering on green; and that, wrapping it up in a linen cloth for a few minutes, it would come out whitish, though not always so; but would not take the colour of any other stuff it was wrapped in. So that what Theophrastus and Plutarch write of its assuming all the colours it comes near, is contrary to experience. Monconys assures us, that the chameleon, when placed in the sun, appears green, though near no green object; that it appears black by the candle, though placed on white paper; and that, when shut up in a box, it becomes yellow and green: and he says, that it never assumes any other colour than these.

Naturalists are very little agreed, as to the reason of this change of colour; and therefore we shall not repeat their several hypotheses, the following being sufficient for our purpose.

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The chameleon is represented as an exceeding lean animal, insomuch that the Italians call it a living skin. M. Perrault observes of that he dissected in the king's library, that one hour it appeared to be a mere skin, and yet the next it would appear plump. Hence we gather that it must have a very great command over the skin as to tension and laxity. Now the animal having it in its power to fill the skin more or less, cannot only alter the texture of the fibres upon which their reflective quality greatly depends, but also to bring parts into sight which before lay concealed, or to conceal such as before lay open: and it is more than probable, that the parts commonly covered are of a somewhat different colour from those always open to the air. On these principles, probably, all the phænomena in the chameleon's colour may be solved. The animal, it is plain, has a power of reflecting different coloured rays from the same parts; and likewise making certain parts reflect, and prevent others from doing so; and hence that medley of colours.

The sheep in Anatolia, particularly about Smyrna, are esteemed a great curiosity on account of their large tails, which are indeed mere lumps of fat hanging to the rump of the animal, and often weighing twelve pounds or upwards. This fat, when the sheep are old, is no better than tallow; but that of lambs is esteemed equal to marrow. These sheep are not peculiar to Anatolia, but are common in Syria, Persia, and other parts of the East, as we are

informed by travellers, who speak of some in those countries whose tails are so thick and long, as to weigh twenty-five or thirty pounds, and are therefore laid upon a light sort of carriage which the sheep draws after it, as well to ease the creature of its burden, as to prevent the wool from being spoiled by trailing on the ground.

Not only the sheep of Anatolia, but the goats also, are taken notice of by travellers as an extraordinary species. In the champaign of Angora, formerly Ancyra, they breed the most beautiful goats in the world, their hair being of a dazzling whiteness, as fine as silk, naturally curled in locks eight or nine inches long, which is worked up in the finest stuffs, especially camblet. Little of this hair is exported unspun, the people of the country being employed in spinning it into thread, which is manufactured at Angora without mixture, contrary to what is practised in Europe. M. Tournefort says, these goats are only to be seen within four or five days journey of Angora, the breed degenerating if they are carried farther.

Among the domestic animals to be found in the Asiatic dominions of the Turks, perhaps none deserves our notice more than the camel, of which there are great numbers in Arabia. The camel is a genus of quadrupeds of the order of the pecora. These creatures are wonderfully fitted by providence for travelling through hot sandy deserts, being able to go four or five days,
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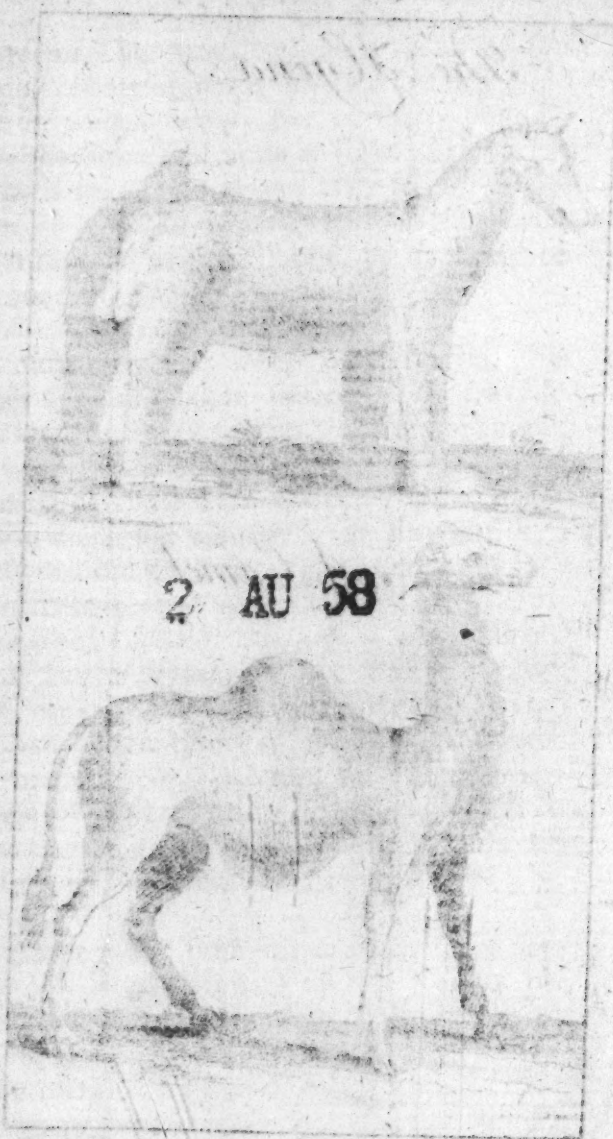
The Hyena



A Camel



Huet's Sculp



some say seven or eight, without water. For this reason they are very much used in long journies taken by merchants, who go in large companies called caravans, to prevent their being plundered by robbers, with which the eastern countries are much infested. The camels browse on the little shrubs they find by the way; or if they meet with nothing of that nature, half a gallon of beans and barley, or a few balls made of the meal which travellers generally carry along with them, will nourish one of them for a whole day. Their usual burden is seven or eight hundred weight, with which they travel about two miles and a half in an hour, and their day's journey is frequently twelve or fifteen hours. The camel has a protuberance on its back, is generally of a brownish colour, and is said to live to the age of fifty, and sometimes to a hundred years. It has a fleshy foot, which is well adapted to the hot sandy countries, where a hoof would soon be destroyed. They are taught to lie down to receive their burden; and when the day's journey is over, travellers usually bind one of their legs to prevent their rising, or else tie the creatures together with a small rope, that they may not stray away without disturbing one another. The Arabs are very fond of the flesh of this animal.

There is a species of these creatures we call dromedaries, which are of a finer shape than the common camel, and have a less protuberance on the back. They will pace and gallop very swiftly, and it is said will easily carry a person

a hundred miles a day; nay, some of the Arabs affirm, that a dromedary will travel as far in one day, as one of their best horses will in six or seven. Its upper lip is cloven in the middle like a hare's, and it has two broad nails on its feet, which are round and fleshy, without division.

The hyæna is a native of Anatolia, and many other parts of the East. This is a species of canis, or dog, with the hairs of the neck long and erect. It is a very singular, and a very ugly animal, of the bigness of a bull-dog: the head is large and short; the nose is obtuse; the mouth is wide, and furnished with a terrible armature of teeth; the eyes are large, black, and of a very fierce aspect; the ears are short, broad, and erect; the neck is very thick, and covered with a kind of bristles instead of hairs, which naturally stand erect, and give a very formidable appearance to the creature. It is an extremely fierce and voracious animal, though not very swift of foot; but it is continually lying in wait for other creatures, and scarce any thing that comes in its way escapes it; its voice is shrill, and has a mournful sound.

The jackall is a native of Asiatic Turkey, and is also a species of the dog kind, distinguished by its slender snout. This is a very beautiful creature, and approaches so greatly to the dog kind, that it would be natural for a person at first sight to mistake it for some mongrel breed of that animal: it is of the size of a small hound;

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the colour of the body is that sort of tan or liver-colour, which we see in spots on some of the hounds and spaniels, only that it is brighter. These creatures hunt in natural packs; and it is frequent to hear the notes of more than two hundred of them together: in these companies they will seize upon animals which they would never dare to attack alone; but there is often fierce battles about the division of the spoil. It is not impossible but lions, and other larger beasts of prey, may be alarmed by the cries of these little creatures in the chace, and may fall in and rob them of their prey; but the general opinion of their attendance on the lion is fabulous.

The tyger is a native of Asia Minor, and frequently met with on mount Ararat: this is a species of the cat kind, with an elongated tail and variegated spots: it is a very large and terrible animal; its fierceness is greater than that of the lion, nor does any living creature escape its attacks. At its full growth it is of the bigness of a small heifer; and though the body is less bulky, the legs are greatly thicker than in that animal; the head is large, the eyes big, and of a fierce and terrible aspect; the mouth is very wide, and the teeth enormously long; the neck is thick, the shoulders large, and the legs of a prodigious strength; the tail is thick and long, but it is not floccose as the lion's tail. The ground-colour of the tyger is a pale tawny, with an admixture of brown, but is all over variegated with streaks of black. The custom of
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this terrible animal is to lie in wait for its prey, upon which it will throw itself forward out of its lurking place with surprising violence and rapidity; and if it misses the prey in the very leap, it often does not turn again to it, but walks away.

The most curious bird in these countries is the ostrich, which is a genus of birds of the order of the gallinæ. It is a native of Arabia, and other parts of the East, and is often seen in such numbers together in those places, that they have the appearance of an army drawn up in order of battle. This is the tallest of all the bird kind when it stands erect. Its neck and head are remarkable, being shaped almost like a camel's, which creature the ostrich also seems to imitate in its manner of walking. Its head rises to the height of a man on horseback, and sometimes higher; and its wings are very strong, but too short to raise it from the ground. Assisted by these, however, they run a great pace; and it is not only a diversion to the Arabs to ride them down, but brings them a considerable profit; for they have a method of shaking the dead body of an ostrich, so as to make the fat dissolve into a sort of oil, which they carry to Alexandria, where it is used as an ointment, and sometimes taken inwardly for disorders arising from a cold constitution. The eggs of the hen are said to be as big as the head of a young child, and to be finely veined like marble, which she hides inconsiderately in the sand, and leaves them to be hatched by the heat of

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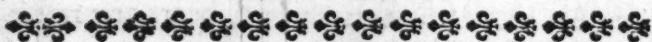


An Ostrich *Holst. Sculp.*

the sun. This disposition, which seems to manifest so much disregard to her young, is taken notice of in Job, chap. xxxix. and certainly argues a great want of that precaution observable in other animals. But there is another circumstance related of the ostrich, which shews an uncommon stupidity, viz. that when she is pursued by the hunters, she runs to hide her head, and particularly her eyes, behind a tree, leaving her large body exposed to view, and imagining that as she no longer sees her pursuers, the danger is over, and she has nothing to apprehend. The feathers of the ostrich are used by way of ornament on testers of beds, canopies, &c.

We shall finish this article with an account of the purple-fish, antiently found in the Mediterranean, near the city of Tyre, whereof we have descriptions in several authors, and shells in most of the cabinets of the curious. This celebrated fish is a kind of Buccinum, a name given by the antients to all fishes whose shell bears any resemblance to a hunting-horn; and it appears from Pliny, that from such a shell-fish the so much famed purple was obtained. This rich dye seems to have arrived at its highest perfection in Pliny's days, in the reigns of the Vespasians, when the artists of the imperial city of the world strove to excel each other in preparations of that tinging juice, to gratify the luxury of the great men of those times; for this colour was then sold at such a high rate, that a pound of the fine Tyrian purple cost a thousand Roman denarii, which

which is more than thirty pounds sterling. M. Reaumur, and authors in general who have treated of this fish, are agreed, that the purple-matter is lodged in a particular vein; but there are several kinds, differing in size and shell, and also in the colour of the tinging liquor. This gentleman observed some on the coast of Poictu, where he also discovered a different kind of purple, produced in oval grains about a quarter of an inch long, full of a white liquor bordering on yellow, which cover certain stones or sands, about which the buccina used to assemble. These grains being bruised on white linen, at first only tinge it yellow, but in three or four minutes give it a very beautiful purple red, provided the linen be exposed to the open air; for the air of a room will not do, even though the windows be open. M. Reaumur adds, that the liquor of the buccinum and that of the grains seems to be nearly of the same nature, except that the latter is more watry.



V E G E T A B L E S.

ARABIA is the most famous country on the earth for its vegetable productions; particularly its delicious fruits, salutiferous and balsamic drugs, and fragrant gums and spices. Of the many curious vegetable productions of Arabia, the most common among us is the seeds or berries of the coffee-tree, which afford an agreeable

able and well-known liquor. This tree, or shrub, which is a native of Arabia Felix, generally rises to the height of seven or eight feet, and sometimes to twelve feet, with a trunk from ten to fifteen inches in circumference. It is covered with a grey smooth bark, and shoots out, through the whole length of its stem, a growth of branches which are always opposite to each other. The leaves, which somewhat resemble those of the bay-tree, are ranged in pairs in the same manner; and from the bottom of these spring fragrant white flowers, very much like those of the jessamine, of which some reckon the coffee-shrub a species. When the flowers fall, they leave a small fruit behind, which is green at first, but reddens as it ripens, and is like a hard cherry both in shape and colour. Two, three, or more of these berries grow together on the same part of the twig, each coated with a husk, or tegument, inclosing another finer skin, in which two seeds, or kernels, are contained, which are what we call coffee. The fruit is usually gathered in May, which is done by shaking the trees, the berries falling on cloths spread underneath to receive them. These being laid on mats to dry in the sun, the outer husks are opened and separated, by drawing rollers of wood or iron over them; after which the berries are exposed to the sun a second time, and then sifted clean for use or sale. The husks, however, are not wasted; for the Arabs roast them as we do the berries, and the drink made of them having a little tartness, is very cooling and pleasant in the heat of summer.

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That odoriferous gum or resin we call frankincense, or simply incense, antiently burnt in temples as a perfum, distils spontaneously from the tree which produces it, during the heats of summer: but notwithstanding the great use of this gum, both in the antient religion and the modern medicine, the tree that yields it, and even the place where it grows, is but little known. The most common opinion has always been, that it was the product of Arabia Felix, and found near the city of Sabe, whence its epithet Sabæum; yet the name olibanum, which it also bears, seems to intimate, that there are of these thuriferous or incense-bearing trees near mount Libanus in Syria, nor is it to be questioned but there are others in the Indies. We are likewise at a loss as to the form of the tree producing incense. Theophrastus says, it is about five cubits high, full of branches, with leaves resembling those of the pear-tree, and a smooth bark like that of the bay-tree; but, adds he, others affirm it to be like the mastic tree, bearing similar fruit, and a reddish-coloured leaf; and others assert, that both its leaves and bark resemble those of the bay-tree.

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END of VOLUME VII.

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